MHC-GX45/RG440S

SERVICE MANUAL

Ver 1.0 2003. 07

US Model
Canadian model
MHC-GX45
AEP Model
UK Model
Australian Model
MHC-RG440S

- MHC-GX45/RG440S are composed of following models. As for the service manual, it is issued for each component model, then, please refer to them.

COMPONENT MODEL NAME

	MHC-GX45	MHC-RG440S
COMPACT DISC DECK RECEIVER SYSTEM	HCD-GX45	HCD-RG440
FRONT SPEAKER SYSTEM	SS-RG440	SS-RG440
SUB WOOFER SPEAKER SYSTEM	SS-WG990	SS-WG990

PARTS LIST

Part No.	Description	Remark
	ACCESSORIES	
	**********	
1-477-716-11	COMMANDER, STANDARD (RM-SRG440)	
1-501-374-52	ANTENNA, LOOP (AM)	
1-754-243-11	ANTENNA (FM)	
⚠1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (UK)	
4-228-953-01	COVER, BATTERY (for RM-SRG440)	
4-236-961-01	FOOT	
4-245-555-11	MANUAL, INSTRUCTION (ENGLISH)	
4-245-555-21	MANUAL, INSTRUCTION (FRENCH) (Canadian)	
4-245-555-41	MANUAL, INSTRUCTION (FRENCH,SPANISH) (AEP)	
4-245-555-51	MANUAL, INSTRUCTION (GERMAN,DUTCH,ITALIAN) (AEP)	
4-245-555-61	MANUAL, INSTRUCTION (SWEDISH,POLISH) (AEP)	
4-245-556-11	MANUAL, INSTRUCTION (DANISH,FINNISH) (AEP)	
4-245-556-21	MANUAL, INSTRUCTION (PORTUGUESE) (AEP)	
4-245-556-41	MANUAL, INSTRUCTION (GREEK) (AEP)	
4-245-556-51	MANUAL, INSTRUCTION (CZECH,HUNGARIAN) (AEP)	
4-245-556-61	MANUAL, INSTRUCTION (TURKISH) (AEP)	
4-245-556-71	MANUAL, INSTRUCTION (SLOVAKIAN) (AEP)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

MINI HI-FI COMPONENT SYSTEM

9-961-067-01
2003G04-1
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Home Audio Company
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REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2003. 07	New

HCD-GX45/RG440

SERVICE MANUAL

Ver. 1.2 2005. 04

US Model
Canadian Model
HCD-GX45
AEP Model
UK Model
Australian Model
HCD-RG440

(Photo: HCD-GX45)

- HCD-GX45/RG440 is the tuner, deck, CD and amplifier section in MHC-GX45/RG440S.

CD Section	Model Name Using Similar Mechanism	NEW
	CD Mechanism Type	CDM74F-K6BD71A
	Base Unit Name	BU-K6BD71A
	Optical Pick-up Name	KSS-213DCP
Tape Deck Section	Model Name Using Similar Machanism	CX-JT8
	Tape Transport Mechanism Type	CWM43FF-13

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS
(HCD-GX45 USA model only)
POWER OUTPUT AND TOTAL HARMONIC DISTORTION:
With 6 ohm loads, both channels driven, from 120 – 10,000 Hz; rated 120 watts per channel minimum RMS power, with no more than 10 % total harmonic distortion from 250 milliwatts to rated output.

Amplifier section

North American models:
HCD-GX45:
Front speaker
Continuous RMS power output (reference): 120 + 120 watts (6 ohms at 1 kHz, 10% THD)
Total harmonic distortion: less than 0.07% (6 ohms at 1 kHz, 60 W)
Sub woofer
Continuous RMS power output (reference): 120 watts (6 ohms at 60 Hz, 10% THD)
Total harmonic distortion: less than 0.07% (6 ohms at 60 Hz, 60 W)

European and Russian models:
HCD-RG440:
Front speaker
DIN power output (rated): 80 + 80 watts (6 ohms at 1 kHz, DIN)
Continuous RMS power output (reference): 100 + 100 watts (6 ohms at 1 kHz, 10% THD)
Music power output (reference): 200 + 200 watts (6 ohms at 1 kHz, 10% THD)
Sub woofer
DIN power output (rated): 80 watts (6 ohms at 60 Hz, DIN)
Continuous RMS power output (reference): 100 watts (6 ohms at 60 Hz, 10% THD)
Music power output (reference): 200 watts (6 ohms at 60 Hz, 10% THD)

Other models:
HCD-RG440:
The following measured at AC 120, 220, 240 V, 50/60 Hz
DIN power output (rated): 80 + 80 watts (6 ohms at 1 kHz, DIN)
Continuous RMS power output (reference): 100 + 100 watts (6 ohms at 1 kHz, 10% THD)

Inputs
GAME INPUT AUDIO L/R (phono jacks): voltage 250 mV, impedance 47 kilohms
GAME INPUT VIDEO (phono jack): 1 Vp-p, 75 ohms
Outputs
PHONES (stereo mini jack): accepts headphones of 8 ohms or more

– Continued on next page –

COMPACT DISC DECK RECEIVER

9-961-068-03 **Sony Corporation**
2005D04-1 **Personal Audio Group**
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VIDEO OUT (phono jack): max. output level 1 Vp-p, unbalanced, Sync negative, load impedance 75 ohms
SPEAKER: accepts impedance of 6 to 16 ohms
SUB WOOFER OUT: accepts impedance of 6 to 16 ohms

CD player section

System	Compact disc and digital audio system
Laser	Semiconductor laser (λ=780 nm) Emission duration: continuous
Frequency response	2 Hz – 20 kHz (±0.5 dB)
Wavelength	780 – 790 nm
Signal-to-noise ratio	More than 90 dB
Dynamic range	More than 90 dB

Tape deck section

Recording system	4-track 2-channel, stereo
Frequency response	50 – 13,000 Hz (±3 dB), using Sony TYPE I cassettes

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range	
Russian models	65.0 – 74.0 MHz (There is no stereo effect) 87.5 – 108.0 MHz
Other models	87.5 – 108.0 MHz
Antenna	FM lead antenna
Antenna terminals	75 ohms unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

Tuning range	
Pan-American models:	530 – 1,710 kHz (with the tuning interval set at 10 kHz) 531 – 1,710 kHz (with the tuning interval set at 9 kHz)
European, Russian, Middle Eastern and Philippine models:	531 – 1,602 kHz (with the tuning interval set at 9 kHz)
Other models:	530 – 1,710 kHz (with the tuning interval set at 10 kHz) 531 – 1,602 kHz (with the tuning interval set at 9 kHz)
Antenna	AM loop antenna
Antenna terminals	External antenna terminal
Intermediate frequency	450 kHz

Speaker

North American models:
Front speaker SS-RG440 for HCD-GX45:

Speaker system	3-way, 3-unit, bass-reflex type
Speaker units	
Sub Woofer:	13 cm, cone type
Woofer:	13 cm, cone type
Tweeter:	5 cm, cone type
Nominal impedance	6 ohms
Dimensions (w/h/d)	Approx. 240 × 325 × 243 mm
Mass	Approx. 4.3 kg net per speaker

Sub woofer speaker SS-WG990 for HCD-GX45:

Speaker system	Bass-reflex type
Speaker units	
Woofer:	20 cm, cone type
Nominal impedance	6 ohms
Dimensions (w/h/d)	Approx. 265 × 325 × 350 mm
Mass	Approx. 6.4 kg

European and Russian models:
Front speaker SS-RG440 for HCD-RG440:

Speaker system	3-way, 3-unit, bass-reflex type
Speaker units	
Woofer:	13 cm, cone type
Sub Woofer:	13 cm, cone type
Tweeter:	5 cm, cone type
Nominal impedance	6 ohms
Dimensions (w/h/d)	Approx. 240 × 325 × 243 mm
Mass	Approx. 4.3 kg net per speaker

Sub woofer speaker SS-WG990 for HCD-RG440:

Speaker system	Bass-reflex type
Speaker units	
Woofer:	20 cm, cone type
Nominal impedance	6 ohms
Dimensions (w/h/d)	Approx. 265 × 325 × 350 mm
Mass	Approx. 6.4 kg

General

Power requirements	
North American models:	120 V AC, 60 Hz
European and Russian models:	230 V AC, 50/60 Hz
Australian model:	230 – 240 V AC, 50/60 Hz
Argentine model:	220 V AC, 50/60 Hz
Mexican model:	127 V AC, 60 Hz
Saudi Arabian model:	120 – 127 V/220 V or 230 – 240 V AC, 50/60 Hz Adjustable with voltage selector
Korean model:	220 V AC, 60 Hz
Other models:	120 V, 220 V or 230 – 240 V AC, 50/60 Hz Adjustable with voltage selector
Power consumption	
USA model:	
HCD-GX45:	180 watts
European and Russian models:	
HCD-RG440:	150 watts 0.35 watts (at the Power Saving Mode)
Other models:	
HCD-RG440:	150 watts
Dimensions (w/h/d)	Approx. 280 × 325 × 407 mm
Mass	
North American models:	
HCD-GX45:	Approx. 9.0 kg
European and Russian models:	
HCD-RG440:	Approx. 9.0 kg
Supplied accessories:	AM loop antenna (1) Remote Commander (1) Batteries (2) FM lead antenna (1) Speaker pads (12)

Design and specifications are subject to change without notice.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Notes on Chip Component Replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

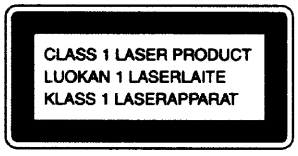
NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.



This appliance is classified as a CLASS 1 LASER product. This label is located on the rear exterior.

SETTING AND RELEASING THE CD DISC TRAY LOCK FUNCTION

This set has a disc tray lock function to prevent discs for demonstration at shops from theft. While this lock function is set, the tray will not be delivered out even when the OPEN/CLOSE button is pressed.

Setting method:

Press the OPEN/CLOSE button while pressing the STOP button.
After a few seconds, the message “LOCKED” will appear on the fluorescent indicator tube with the tray locked.

Releasing method:

Just as the lock is set, press the OPEN/CLOSE button while pressing the STOP button.
After a few seconds, the message “UNLOCKED” will appear with the lock released.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes).
Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instruments.

2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

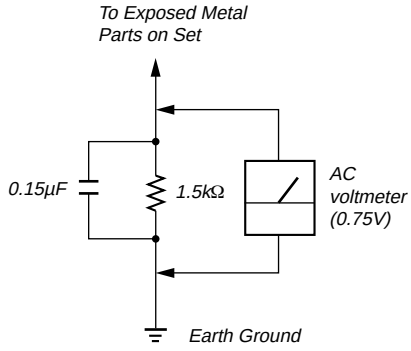


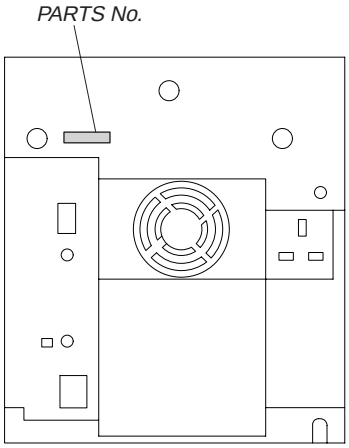
Fig. A. Using an AC voltmeter to check AC leakage.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

Carry out the “S curve check” in “CD section adjustment” and check that the S curve waveforms is output three times.

MODEL IDENTIFICATION

– BACK PANEL –



MODEL	PARTS No.
GX45: US, CND	4-244-697-31
RG440: AEP, UK, AUS	4-244-697-41

• Abbreviation
CND : Canadian model
AUS : Australian model

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List of button locations and reference pages

How to use this page

Use this page to find the location of buttons and other parts of the system that are mentioned in the text.

Illustration number
TAPE A/B 26 (16, 17)
Name of button/part — Reference page

Main unit

ALPHABETICAL ORDER

A - L

ALBUM +* 15 (10, 12)
ALBUM –* 20 (10, 12)
CD 28 (9, 12, 17)
CD SYNC 24 (17)
Deck A 21 (16)
Deck B 14 (16, 17)
DISC 1 – 3 8 (10, 12)
DISC SKIP/EX-CHANGE 9 (9, 10)
Disc tray 7 (9)
DISPLAY 2 (15, 22, 23)
Display window 4
EFFECT ON/OFF 11 (18)
GAME 25 (19, 25)
GAME EQ 12 (18)
GAME INPUT AUDIO L/R jacks 19 (25)
GAME INPUT VIDEO jack 18 (25)
GAME MIXING 12 (19)
GROOVE 12 (18, 28)

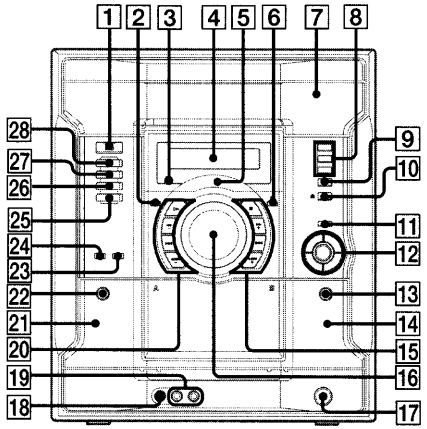
M - Z

MOVIE EQ 12 (18)
MUSIC EQ 12 (18)
PHONES jack 17
Power illuminator 5 (24)
Remote sensor 3
REC PAUSE/START 23 (17, 19)
TAPE A/B 26 (16, 17)
TUNER/BAND 27 (13, 14, 17)
VOLUME control 16 (18, 20)

BUTTON DESCRIPTIONS

I/⏻ (power) 1 (7, 14, 20, 26, 28)
⏸ (pause) 6 (10, 16)
⏏ (eject) 10 (9)
PUSH ⏏ (deck B) (eject) 13 (16)
■ (stop) 15 (10, 16, 17)
▶▶+ (fast forward) 15 (10, 13, 16)
▶▶| (go forward) 15 (8, 10, 13, 16, 20)
▷ (play) 20 (10, 16)
–◀◀ (rewind) 20 (10, 13, 16)
|◀◀ (go back) 20 (8, 10, 13, 16, 20)
⏏ PUSH (deck A) (eject) 22 (16)

* MHC-GX45/GX35/RG440S/RG330/RG310 and MHC-RG220 (European and Russian models) only



continued

Remote control for MHC-GX45/GX35/RG440S/RG330/RG310 and MHC-RG220 (European and Russian models)

ALPHABETICAL ORDER

A - H

ALBUM +/– 14 (10, 12)
CD 19 (9, 12, 17)
CLEAR 5 (12)
CLOCK/TIMER SELECT 2 (21, 22)
CLOCK/TIMER SET 3 (8, 20, 21)
DISPLAY 6 (15, 22, 23)
D. SKIP 7 (10)
ENTER 16 (8, 12, 13, 20, 21)
FM MODE 21 (15)
GAME (MD)* 10 (19, 25)
GROOVE 13 (18, 28)

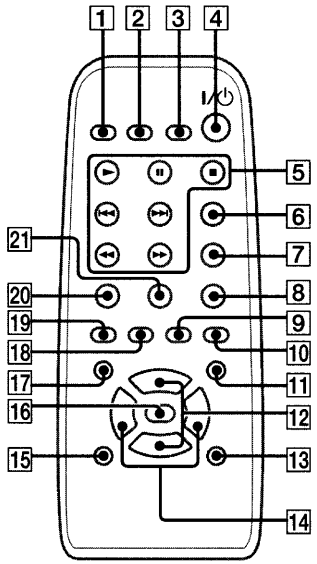
I - Z

ILLUMINATION 15 (24)
PLAY MODE 20 (10, 12, 16)
PRESET EQ 17 (18)
PRESET –/+ 5 (13, 14)
REPEAT 21 (11)
SLEEP 1 (20)
SURROUND 11 (19)
TAPE A/B 9 (16, 17)
TUNER/BAND 18 (13, 14, 17)
TUNER MEMORY 8 (13)
TUNING –/+ 5 (13, 15)
VOL +/– 12 (18, 20)

BUTTON DESCRIPTIONS

I/⏻ (power) 4 (7, 14, 20, 26, 28)
◀◀/▶▶ (rewind/fast forward) 5 (10, 16)
|◀◀/▶▶| (go back/go forward) 5 (8, 10, 13, 16, 20)
▶ (play) 5 (10, 16)
⏸ (pause) 5 (10, 16)
■ (stop) 5 (10, 16, 17)

* This button is used to switch to GAME function.

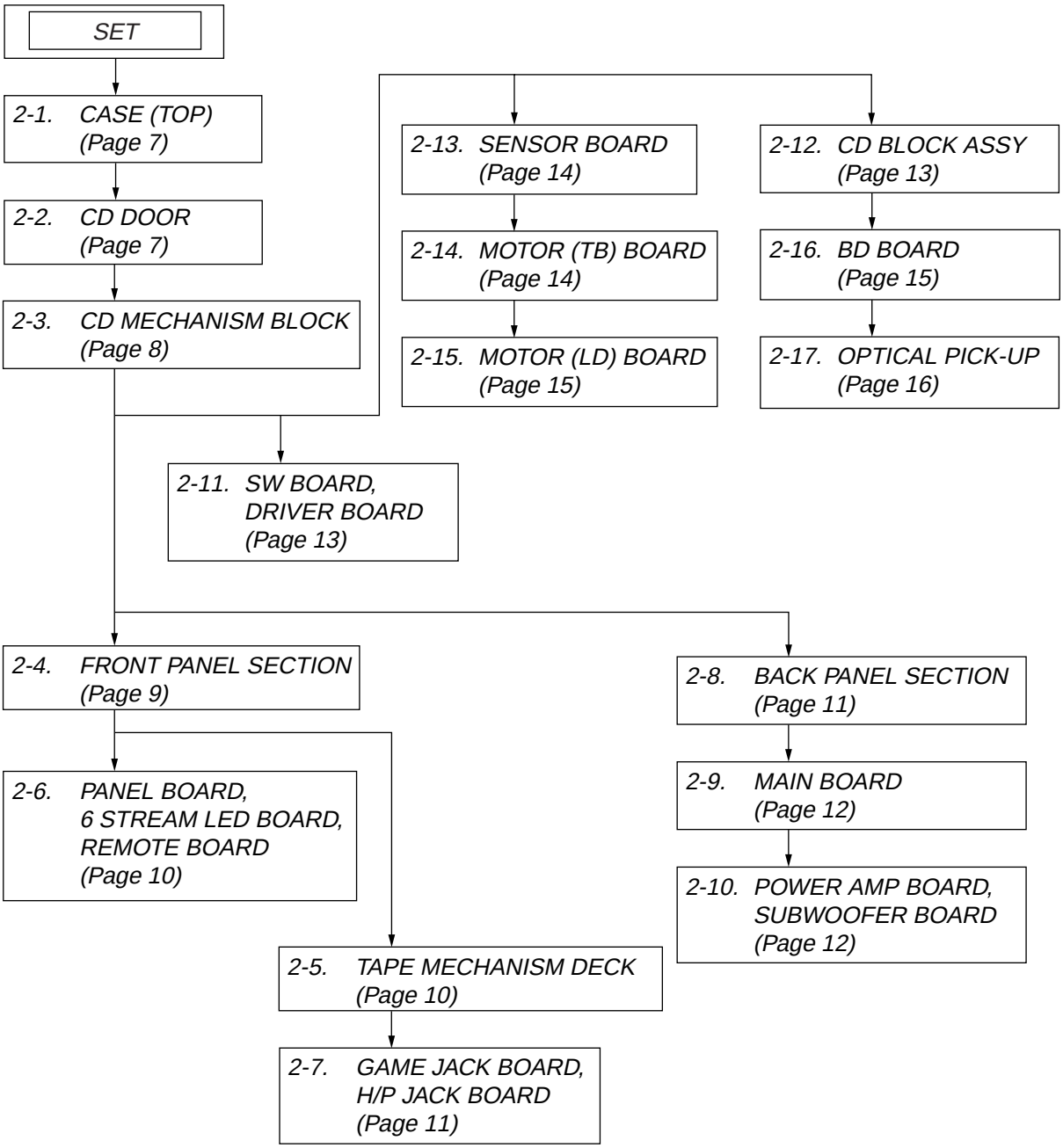


continued

This section is extracted from instruction manual.

SECTION 2
DISASSEMBLY

Note : Disassemble the unit in the order as shown below.


SET
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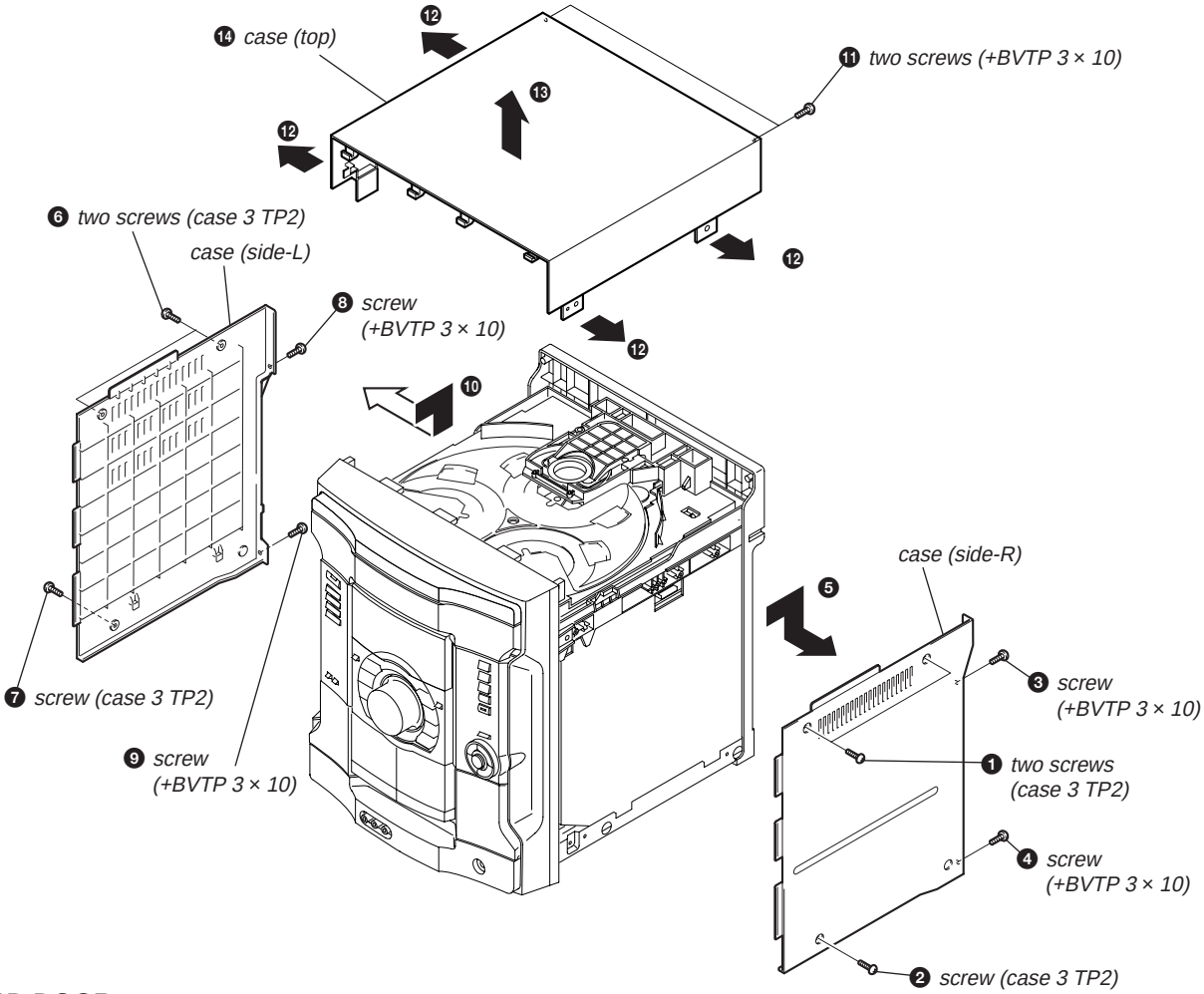
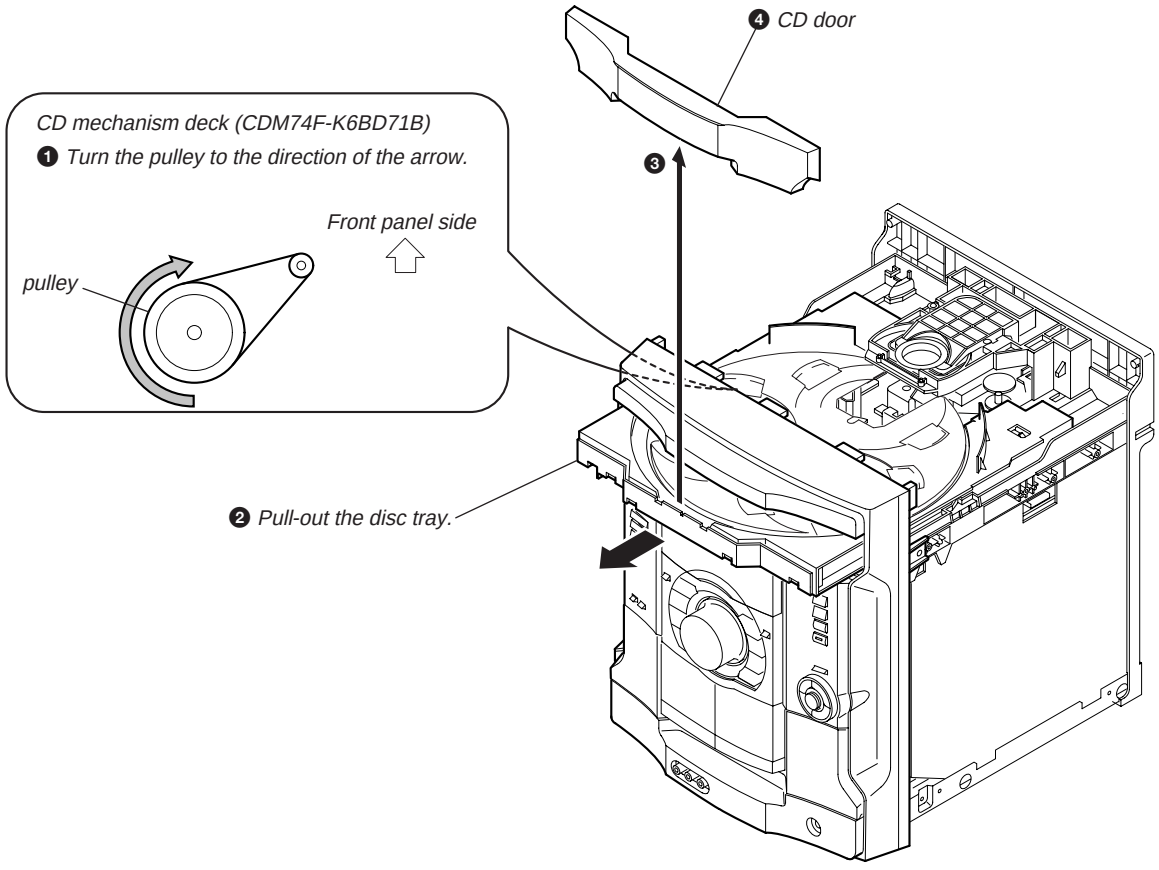
2-8. BACK PANEL SECTION (Page 11)
2-9. MAIN BOARD (Page 12)
2-10. POWER AMP BOARD, SUBWOOFER BOARD (Page 12)

Note : Follow the disassembly procedure in the numerical order given.

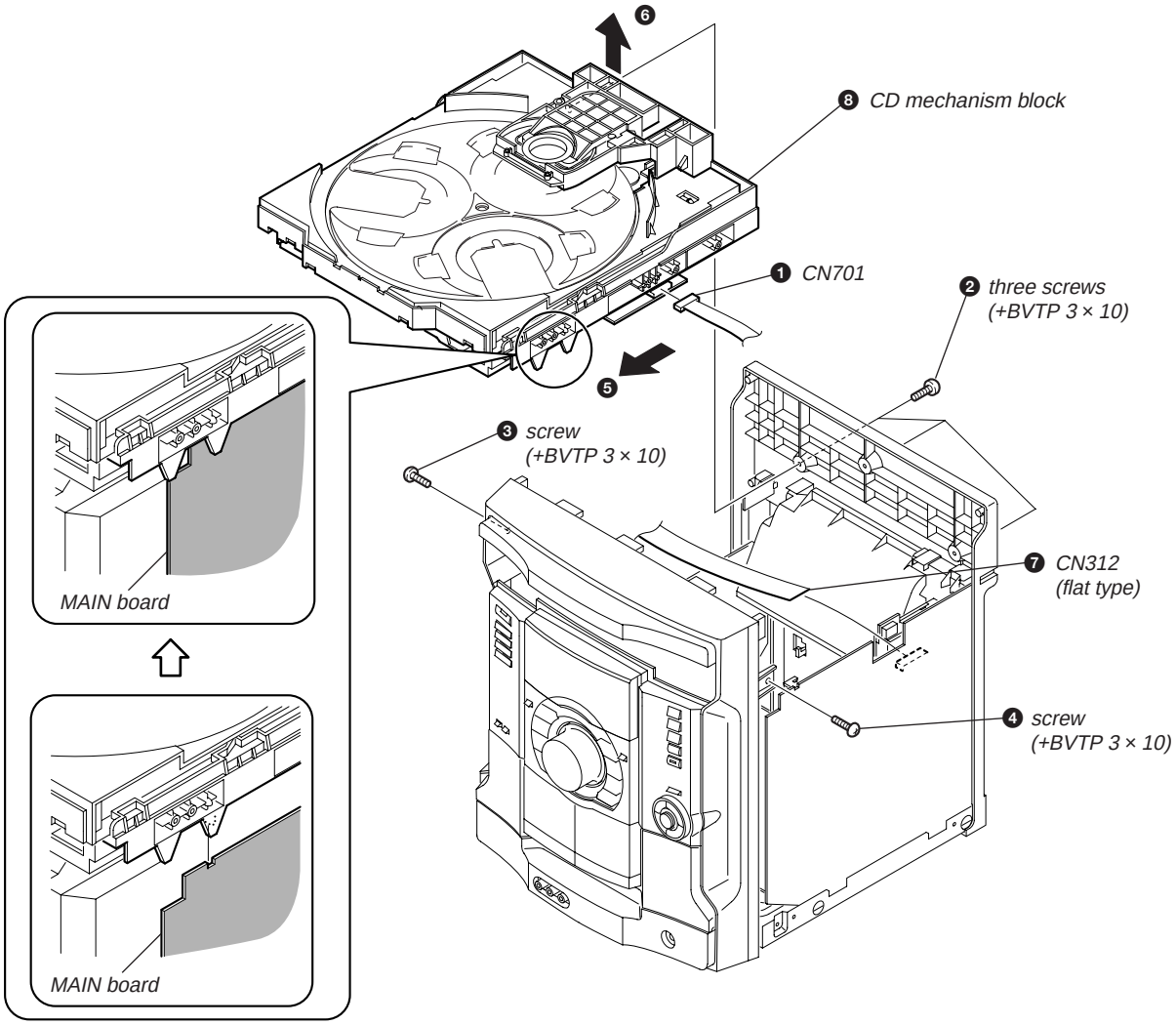
2-1. CASE (TOP)



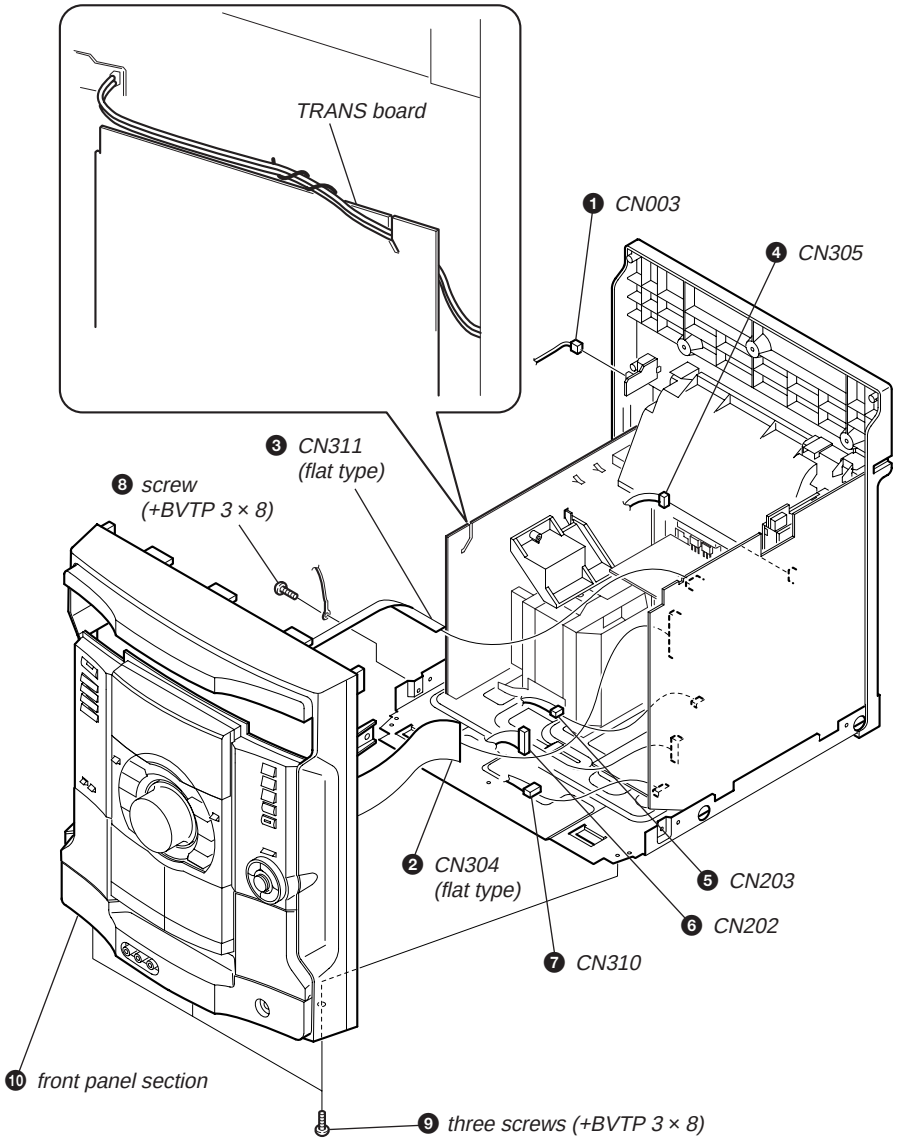
2-2. CD DOOR



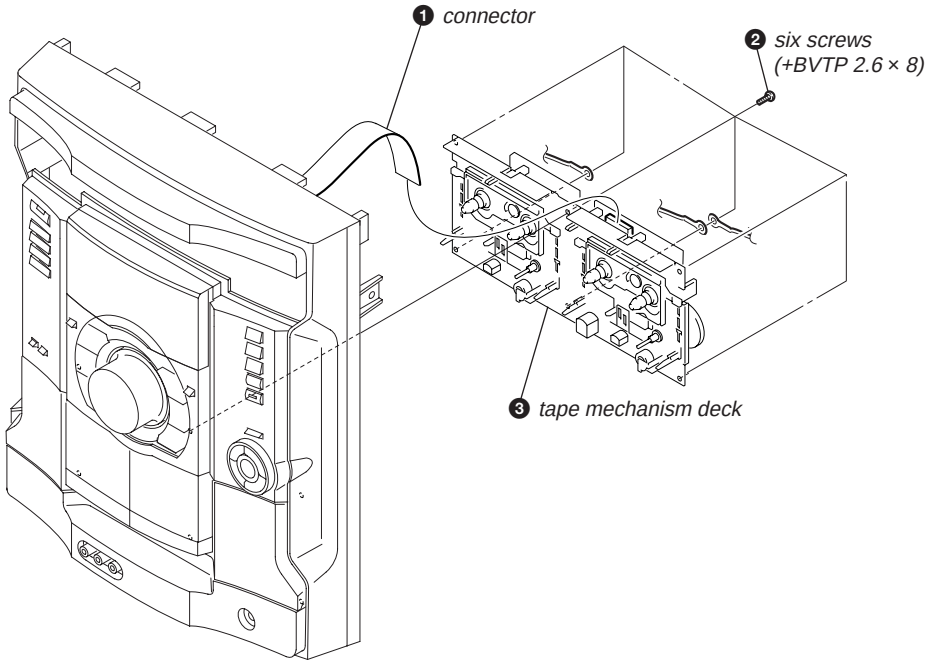
2-3. CD MECHANISM BLOCK



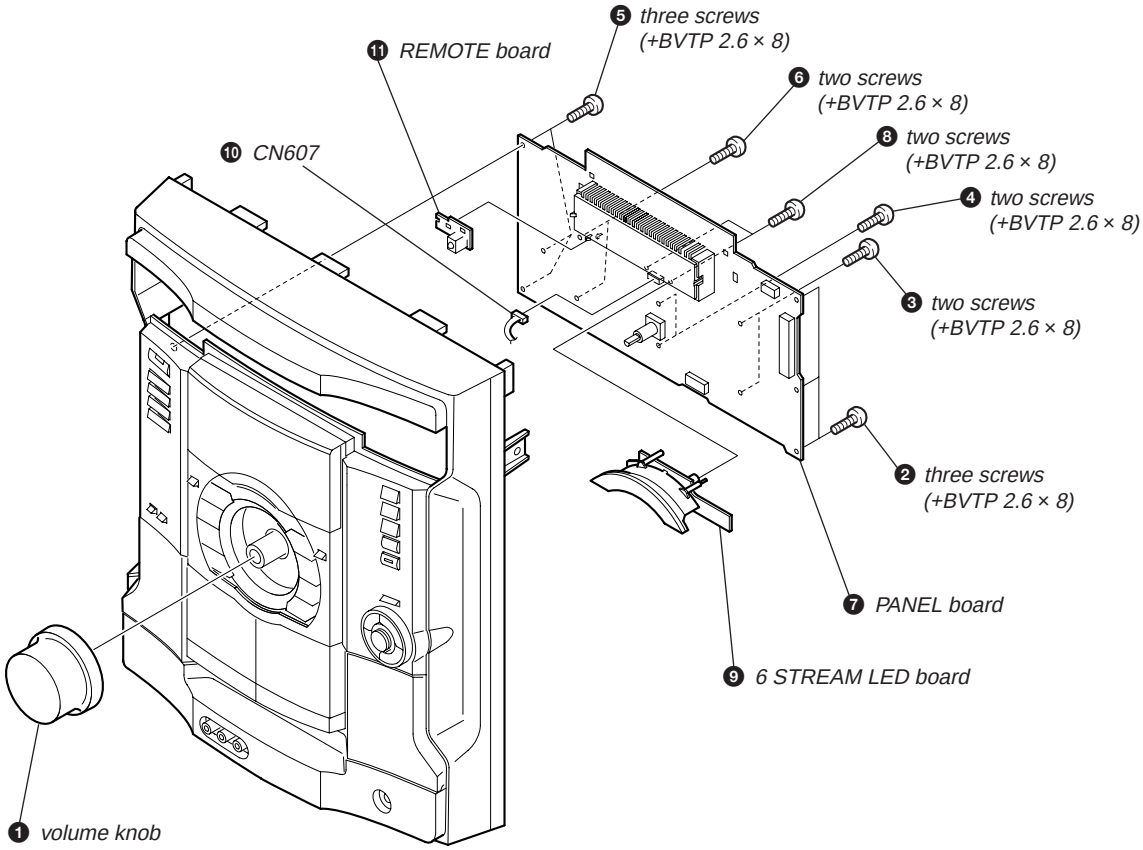
2-4. FRONT PANEL SECTION



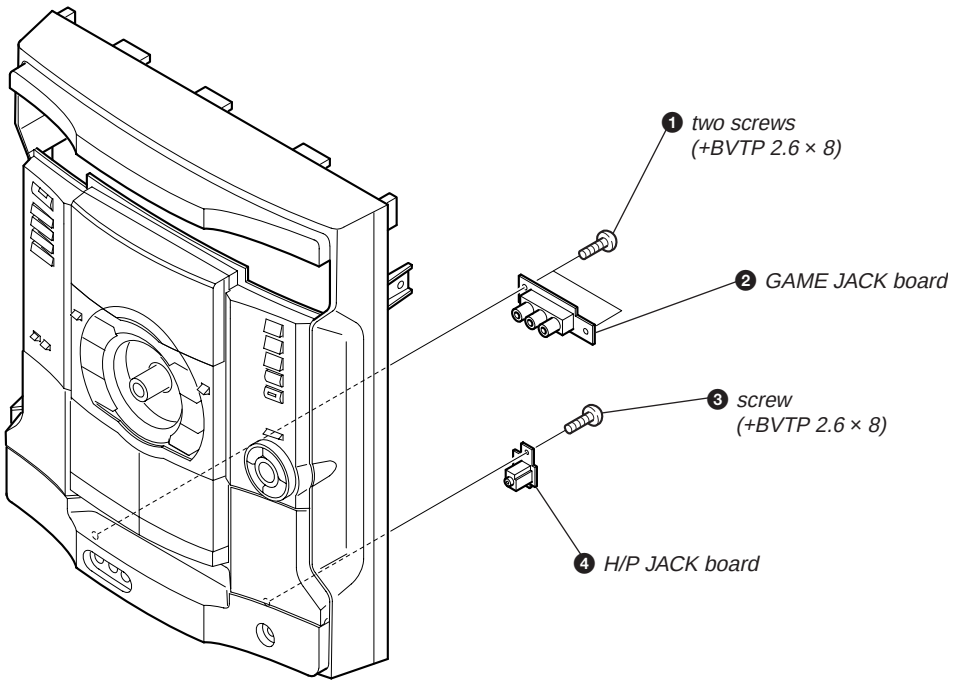
2-5. TAPE MECHANISM DECK



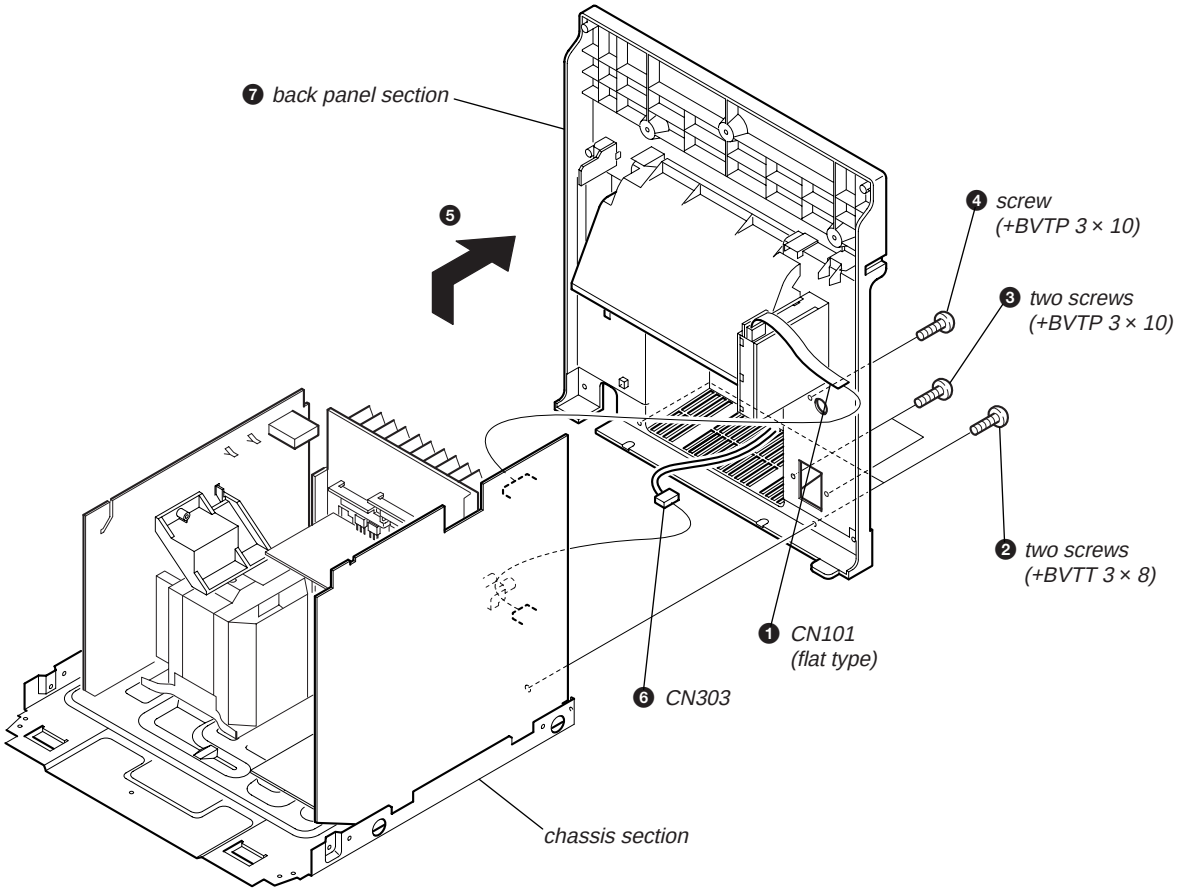
2-6. PANEL BOARD, 6 STREAM LED BOARD, REMOTE BOARD



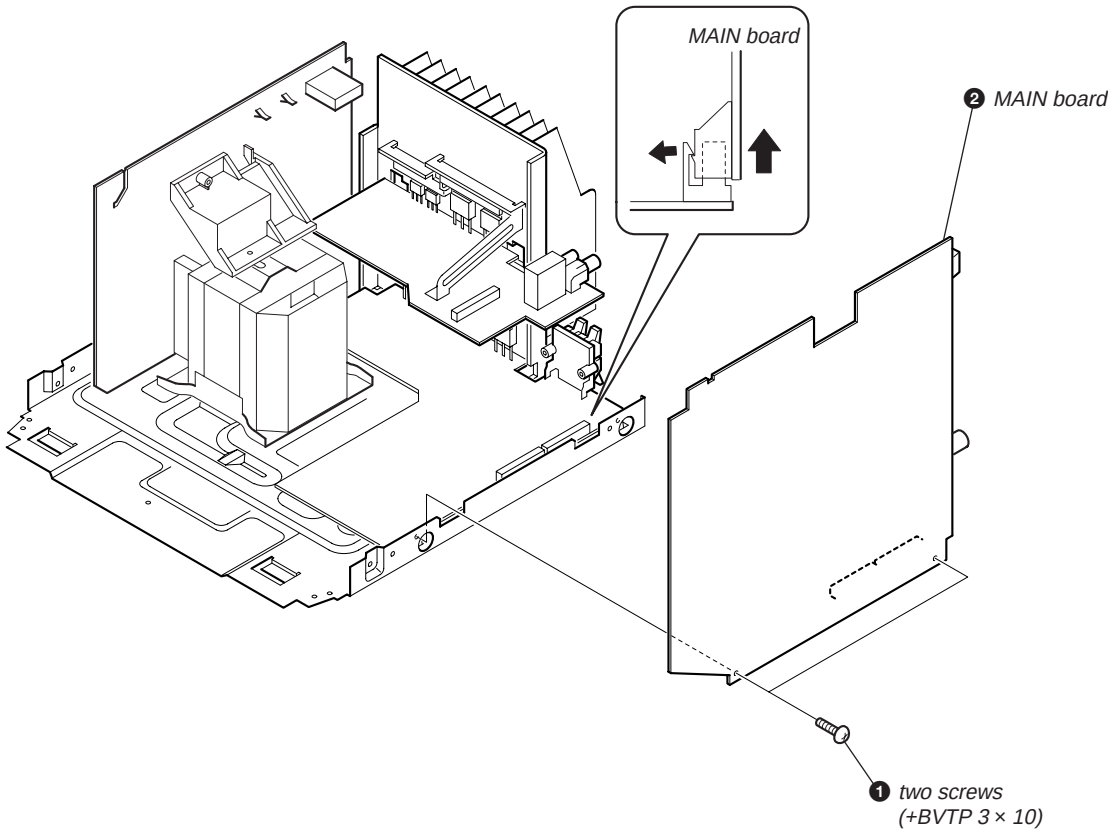
2-7. GAME JACK BOARD, H/P JACK BOARD



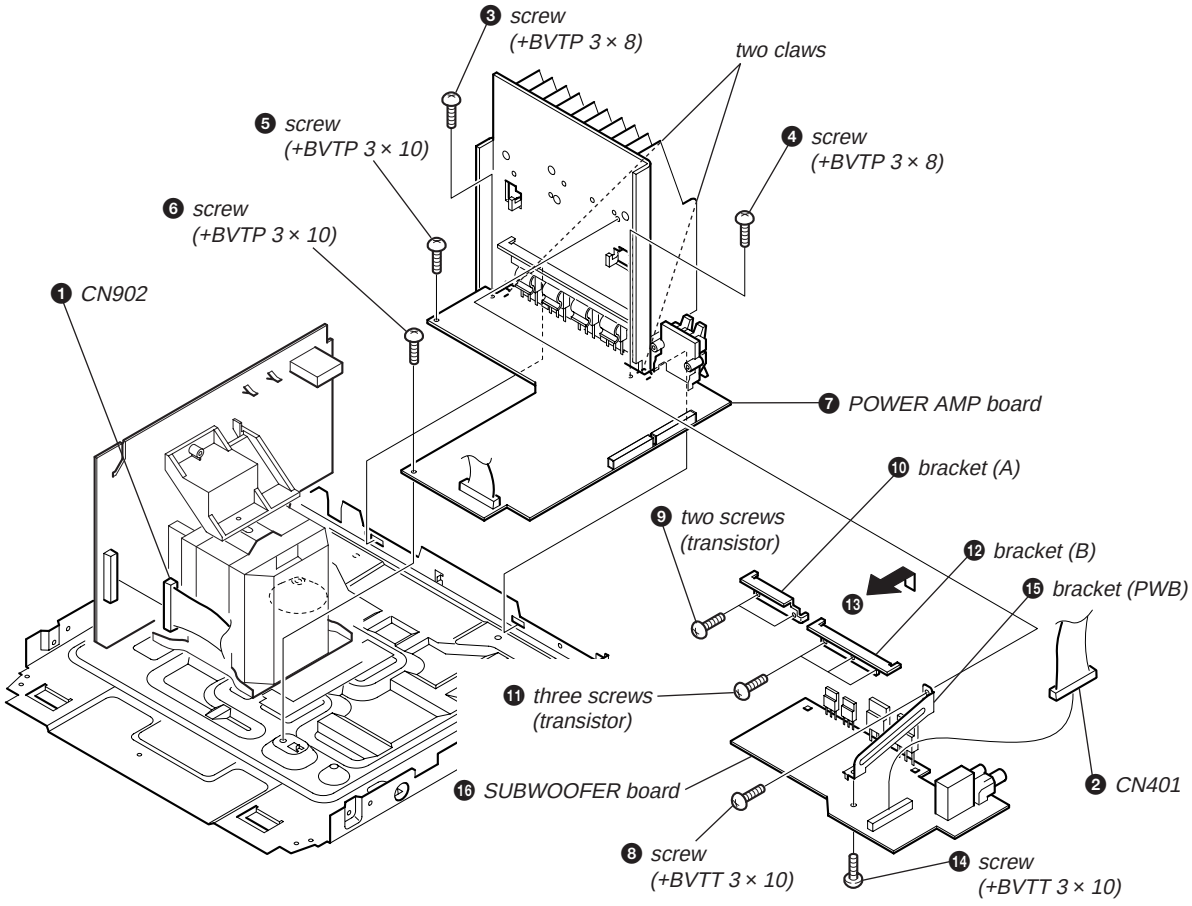
2-8. BACK PANEL SECTION



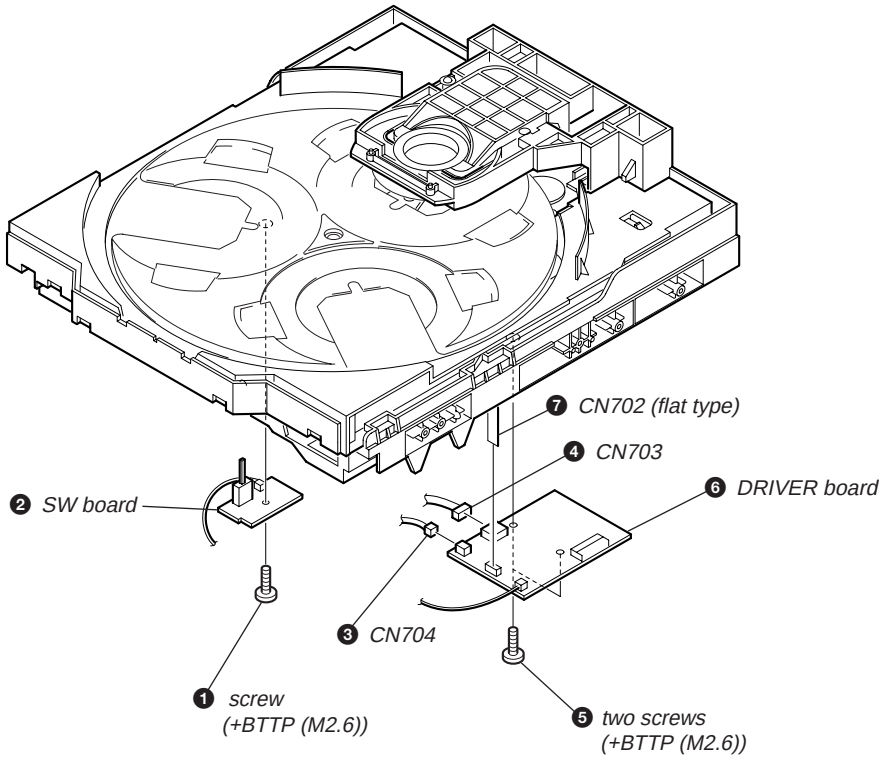
2-9. MAIN BOARD



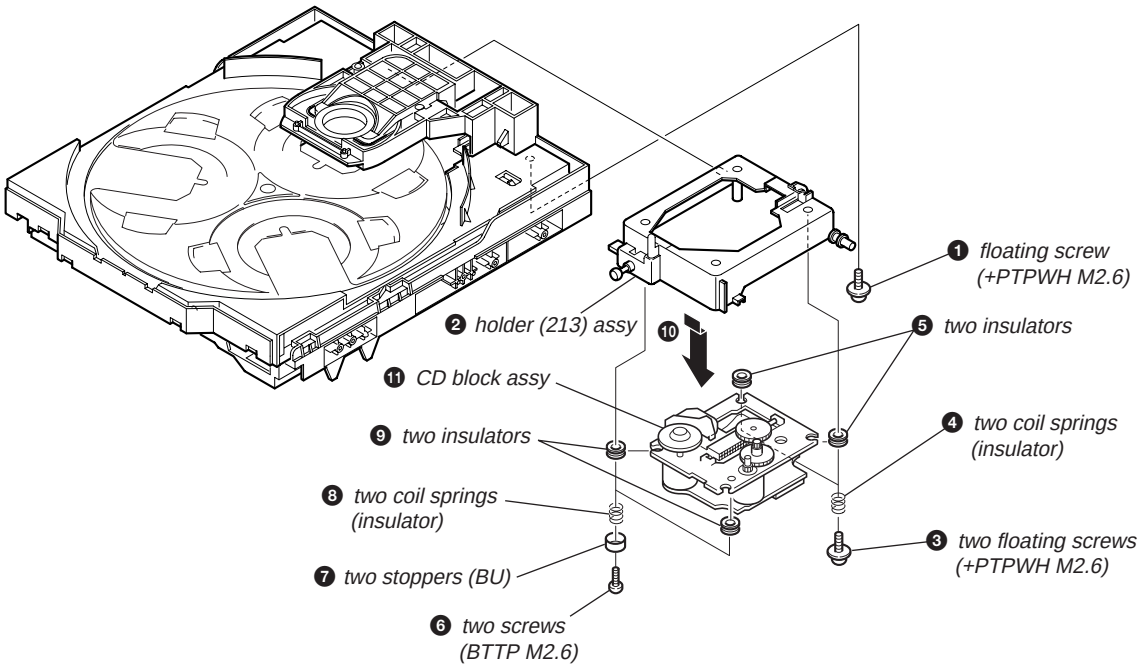
2-10. POWER AMP BOARD, SUBWOOFER BOARD



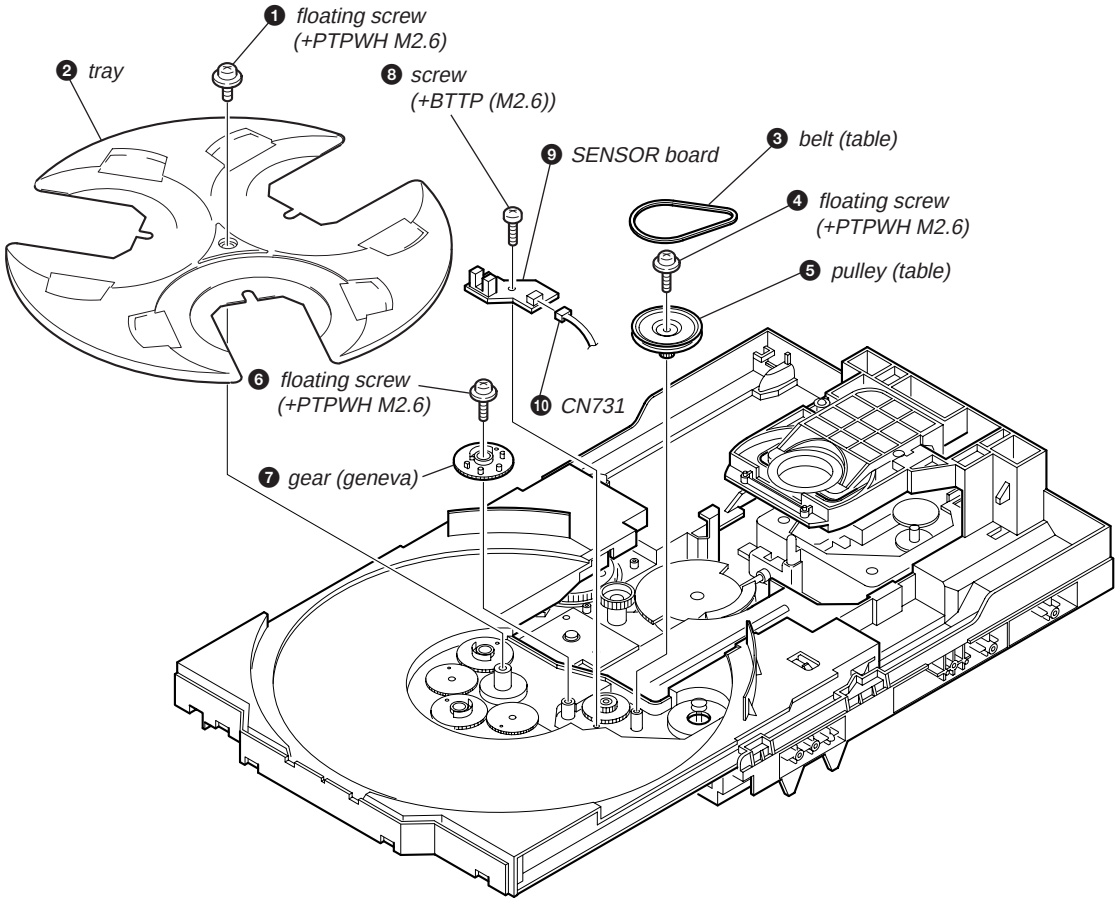
2-11. SW BOARD, DRIVER BOARD



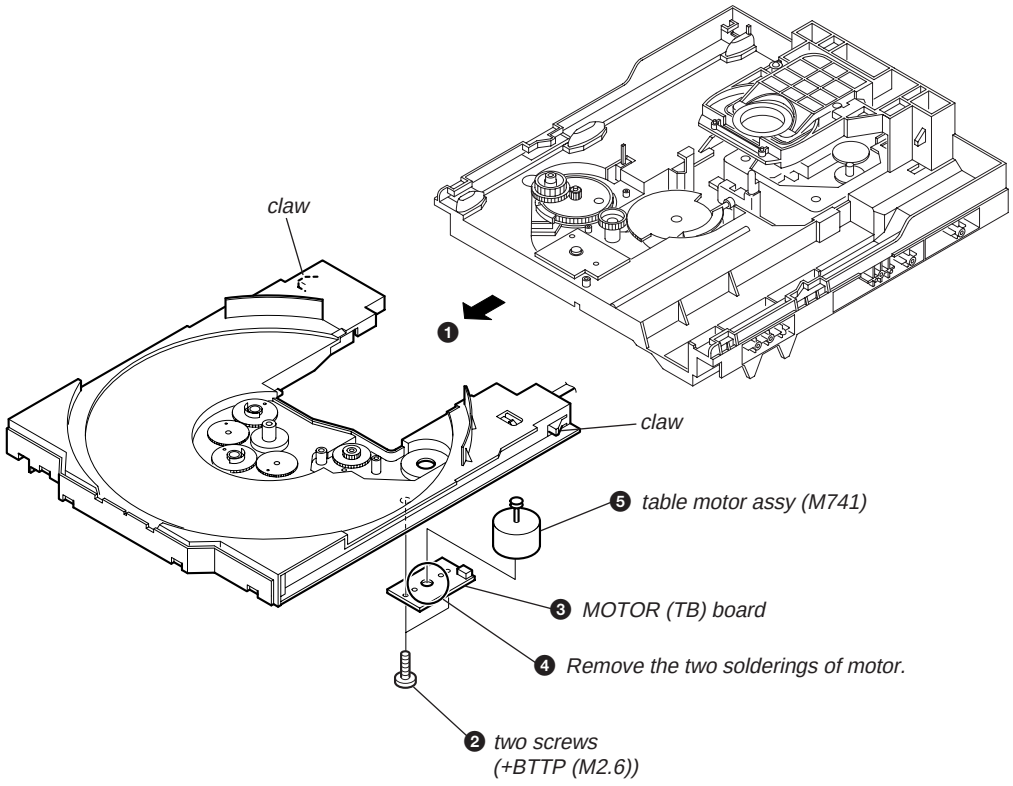
2-12. CD BLOCK ASSY



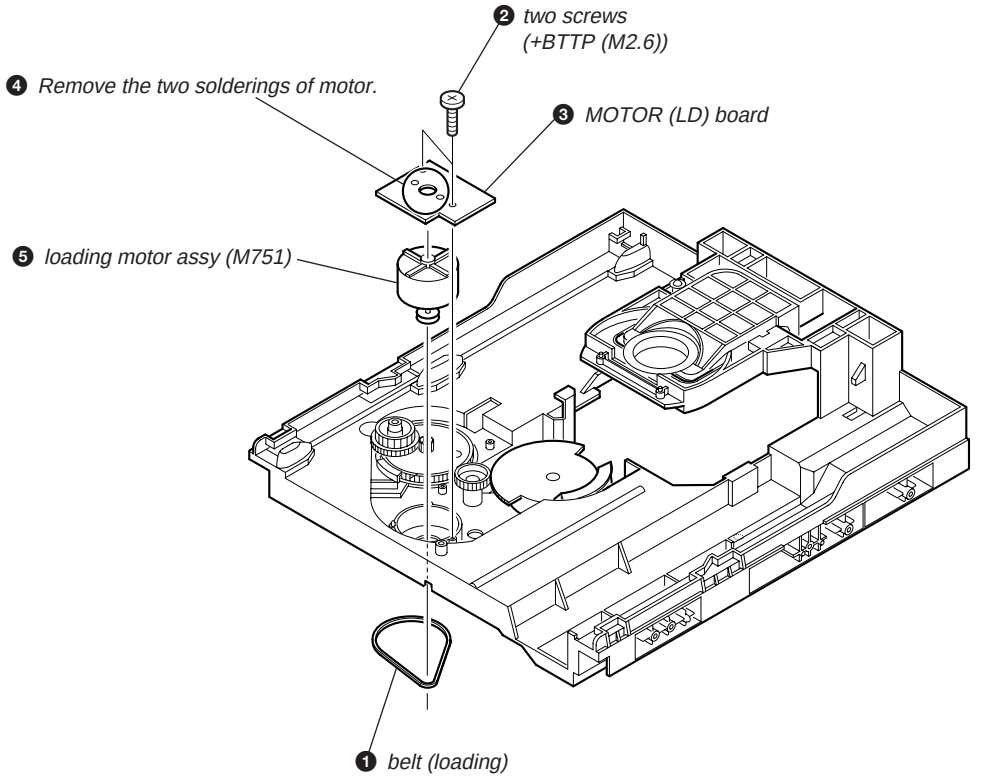
2-13. SENSOR BOARD



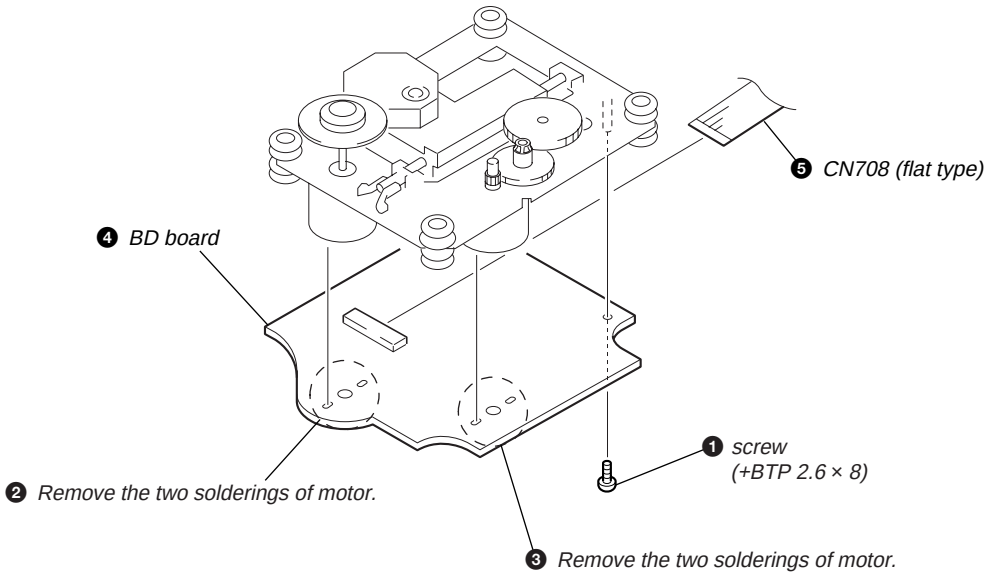
2-14. MOTOR (TB) BOARD



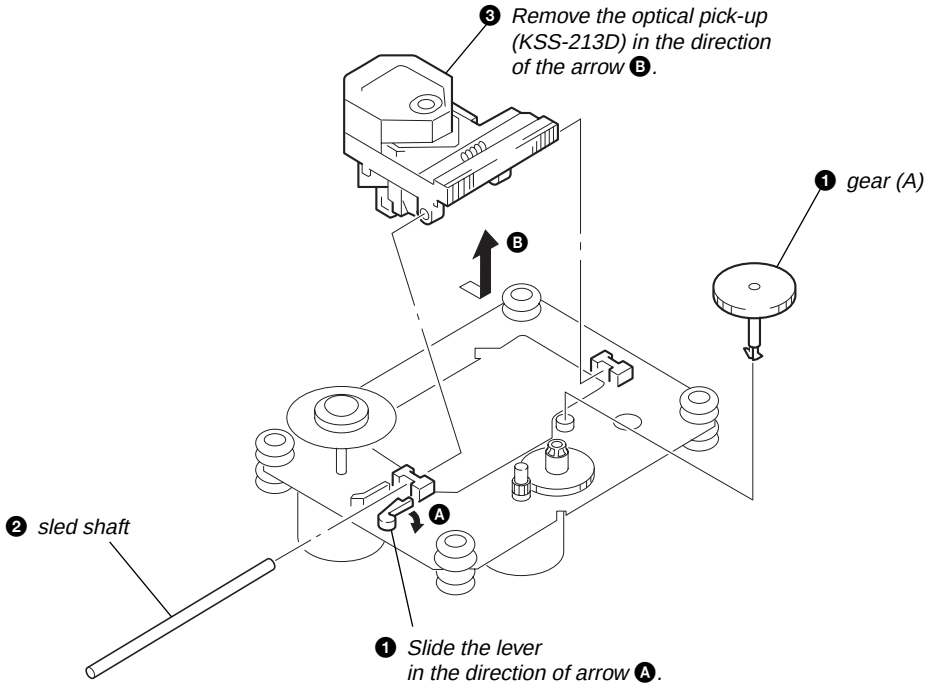
2-15. MOTOR (LD) BOARD



2-16. BD BOARD



2-17. OPTICAL PICK-UP


❸ Remove the optical pick-up (KSS-213D) in the direction of the arrow ❽.
❶ gear (A)
❽
❷ sled shaft
❹
❶ Slide the lever in the direction of arrow ❹.

SECTION 3
TEST MODE

[COLD RESET]

• The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

Procedure:

1. Press the [POWER] key to turn the power ON.
2. Press three keys of [■] , [GROOVE] and [POWER] simultaneously.
3. The message “COLD RESET” is displayed on the fluorescent indicator tube momentarily, then becomes standby states.

[TUNER STEP CHANGE-OVER]

(Except AEP and UK models)

• A step of AM channels can be changed over between 9 kHz and 10 kHz.

Procedure:

1. Press the [POWER] key to turn the power ON.
2. Press the [TUNER BAND] key to select “AM”.
3. Press the [POWER] key to turn the power OFF.
4. Press two keys of [TUNER/BAND] and [POWER] simultaneously.
5. The message “9K STEP” or “10K STEP” is displayed on the fluorescent indicator tube, and thus the channel step is changed over.

[CD SHIP MODE]

• This mode moves the optical pick-up to the position durable to vibration. Use this mode when returning the set to the customer after repair.

Procedure:

1. Press the [POWER] key to turn the power ON.
2. Press the [CD] key to select “CD”.
3. Press two keys of [CD] and [POWER] simultaneously.
4. The message “LOCK” is displayed on the fluorescent indicator tube, and the CD ship mode is set.

[CD TRAY LOCK MODE]

• This mode is used to unable to take sample disc out of tray in the shop.

Procedure:

1. Press the [POWER] key to turn the power ON.
2. Press the [CD] key to select “CD”.
3. Set disc on the tray.
4. While pressing the [■] key, press the [⏏] key for 5 seconds.
5. The message “LOCKED” is displayed on the fluorescent indicator tube and the tray is locked. (Even if pressing the [⏏] key, the message “LOCKED” is displayed on the fluorescent indicator tube and the tray is locked)
6. To release from this mode, while pressing the [■] key, press the [⏏] key for 5 seconds.
7. The message “UNLOCKED” is displayed on the fluorescent indicator tube and the tray is unlocked.

[AMP TEST MODE]

• This mode is used to set the parameter of AMP IC for adjustment of tone quality and VACS level and display VACS status.

Procedure:

1. Press the [POWER] key to turn the power ON.
2. Press three keys of [■] , [GAME EQ] and [EFFECT ON/OFF] simultaneously.
3. When the AMP test mode is activated, the message “AMP TEST” is displayed on the fluorescent indicator tube momentarily.
4. Press two keys of [GAME EQ] and [DISC 2] simultaneously, mode is changed over to parameter setting of AMP IC and display of VACS status.
5. When the VACS status, the message VACS level, VACS signal level, and VACS signal hold level is displayed on the fluorescent indicator tube.
6. Press the [GROOVE] key, DBFB ON/OFF is changed over.
7. Press the [GAME MIXING] key, surround ON/OFF is changed over.
8. To release from this mode, press two keys of [GAME EQ] and [MOVIE EQ] simultaneously.

[AGING MODE]

- This mode can be used for operation check of CD section and tape deck section.
  CD section and tape deck section work in parallel.

If an error occurred:

The aging operation stops only an error occurred sections and display then status.

If no error occurs:

The aging operation continues repeatedly.

Procedure:

1. Press the [POWER] key to turn the power ON.
2. Press the [CD] key to select "CD".
3. Set disc on the tray and set tape into the deck.
4. Set the "ALL DISCS" mode and "REV OFF" mode.
5. Press three keys of [■] , [GAME EQ] and [DISC SKIP/EX-CHANGE] simultaneously.
6. The message "AGING" is displayed on the fluorescent indicator tube momentarily, then aging operations of CD and tape are started at the same time.
7. To release from this mode, operate the "COLD RESET".

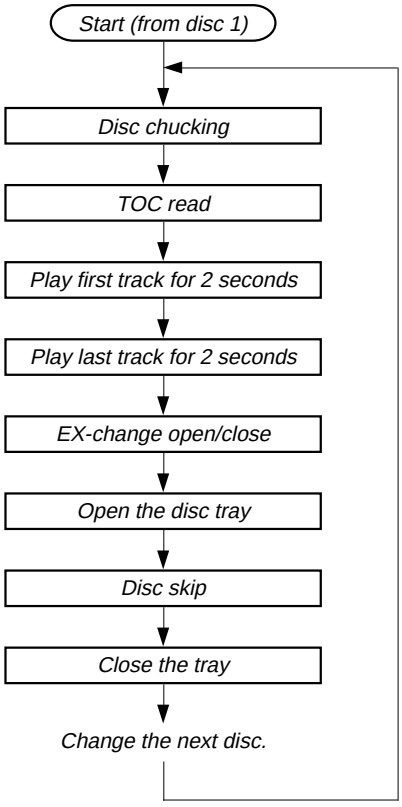
1. Display at the Aging Mode

Display operating state of CD section and tape deck section alternately.
If an error occurred, stop display which that section.

2. CD Section

The sequence during the aging mode is following as below.
Display at the aging mode is the same as the normal operation.

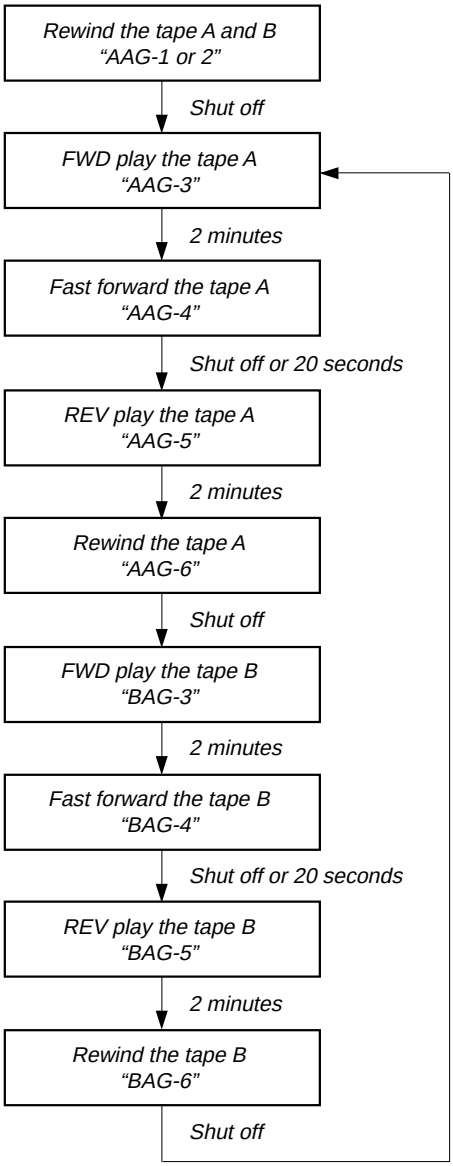
Aging mode sequence (CD section) :



3. Tape Deck Section

The sequence during the aging mode is following as below.
If an error occurred, stop display that step.

Aging mode sequence (tape deck section) :



Note: "∗AG-∗" is display of each step.

[GC TEST MODE]

• This mode is used to check the fluorescent indicator tube, LED and key.

Procedure:

1. Press the [POWER] key to turn the power ON.
2. Press three keys of [■], [GAME EQ] and [DISC 2] simultaneously.
3. Fluorescent indicator tube and LEDs are all turned ON.
4. Press two keys of [GAME EQ] and [DISC 2] simultaneously, mode is changed over.
5. In the key check mode, press each key, the defined key number of every each key list is displayed on the fluorescent indicator tube.
6. In the key count check mode, "KEYCNT 0" is displayed on the fluorescent indicator tube. Each time a key is pressed, "KEYCNT" value increases. However, once a key is pressed, it is no longer taken into account.
7. In the headphone input check mode, connect the headphone, the message "H_P ON" is displayed on the fluorescent indicator tube, and disconnect the headphone, the message "H_P OFF" is displayed on the fluorescent indicator tube.
8. In the volume check mode, turn the [VOLUME] knob, the display on the fluorescent indicator tube is changed over to "VOLUME UP", "VOLUME FLAT" or "VOLUME DOWN"

[MC TEST MODE]

• This mode is used to check operations of Amplifier.

Procedure:

1. Press the [POWER] key to turn the power ON.
2. Press three keys of [■], [GAME EQ] and [DISC 3] simultaneously.
3. When the MC test mode is activated, the message "TEST MODE" is displayed on the fluorescent indicator tube momentarily, then VACS level is displayed on the fluorescent indicator tube.
4. Press the [MUSIC EQ] key, the display on the fluorescent indicator tube is changed over to "GEQ MAX", press the [EFFECT ON/OFF] key, the display on the fluorescent indicator tube is changed over to "GEQ FLAT", press the [MOVIE EQ] key, the display on the fluorescent indicator tube is changed over to "GEQ MIN",
5. Turn the [VOLUME] knob, the display on the fluorescent indicator tube is changed over to "VOLUME MAX", "VOLUME 16" or "VOLUME MIN"
6. Press the [GROOVE] key, VACS ON/OFF is changed over.
7. When the [REC PAUSE/START] key is pressed with a tape set in the deck-B, the function is switched "MD" or "VIDEO" and recording starts. When the [◀◀] or [▶▶] key is pressed during recording, the tape is rewound back to the beginning of recording, the function is switched to "TAPE B", then playback starts.
8. When the [CD SYNC] key is pressed with the test tape (AMS-100, AMS-110A) in the deck, number of space between tunes is counted, then if AMS-110A is set, "OK" is displayed on the fluorescent indicator tube and if AMS-100 is set, "NG" is displayed on the fluorescent indicator tube.
9. To release from this mode, press the [POWER] key.

[MODEL, DESTINATION AND VERSION DISPLAY]

• This mode is used to check the model, destination and software version.

Procedure:

1. Set to the standby state.
2. Press three keys of [■] , [GAME EQ] and [MOVIE EQ] simultaneously.
3. When the model, destination and version display mode is activated, the model an destination is displayed on the fluorescent indicator tube.
4. Press two keys of [GAME EQ] and [DISC 2] simultaneously, mode is changed over to model and destination display mode and version display mode.
5. To release from this mode, press the two keys of [GAME EQ] and [MOVIE EQ] simultaneously.

[CD ERROR CODE DISPLAY]

• This mode can be used for error display of CD section.

Procedure:

1. Press the [POWER] key to turn the power ON.
2. Press the [CD] key to select "CD".
3. Press three keys of [■], [GAME EQ] and [DISC 1] simultaneously.

Note: Error code is not displayed on the fluorescent indicator tube.

[CD SERVICE MODE]

• This mode can run the CD sled motor freely. Use this mode, for instance, when cleaning the optical pick-up.

Procedure:

1. Press the [POWER] key to turn the power ON.
2. Press the [CD] key to select "CD".
3. Press three keys of [■] , [GAME EQ] and [⏏] simultaneously.
4. When the CD service mode is activated, the message "TRAVERS ON" is displayed on the fluorescent indicator tube.
5. Press the [▶▶] key, optical pick-up move to outside track and the message "SLED OUT" is displayed on the fluorescent indicator tube.
6. Press the [◀◀] key, optical pick-up move to inside track and the message "SLED IN" is displayed on the fluorescent indicator tube..
7. Press the [MOVIE EQ] key, traverse ON/OFF is changed over.

[5 REPEAT LIMIT CANCEL]

• Number of repeat for CD playback is 5 times when the repeat mode is "REPEAT". This mode is used to enables CD to repeat playback for limitless times.

Procedure:

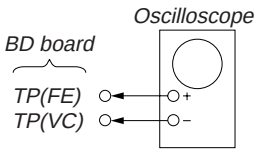
1. Press the [POWER] key to turn the power ON.
2. Press the [CD] key to select "CD".
3. Press three keys of [■] , [GAME EQ] and [▷] simultaneously.

SECTION 4
ELECTRICAL ADJUSTMENTS

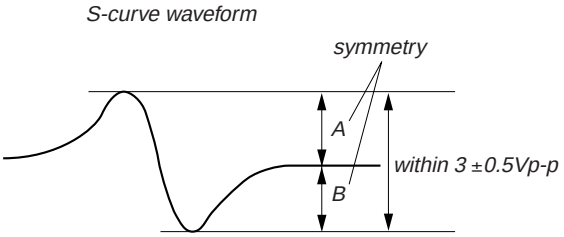
CD SECTION

Note:
1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MW impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

S-CURVE CHECK

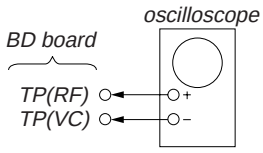


Procedure :
1. Connect an oscilloscope to TP (FE) and TP (VC).
2. Turn the power on.
3. Load a disc (YEDS-18) and actuate the focus search. (In consequence of open and close the disc tray, actuate the focus search)
4. Confirm that the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 3 ± 0.5 Vp-p.



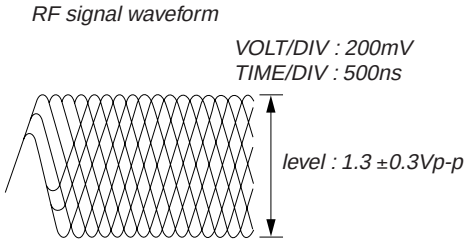
Note: • Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
• Take sweep time as long as possible and light up the brightness to obtain best waveform.

RF LEVEL CHECK



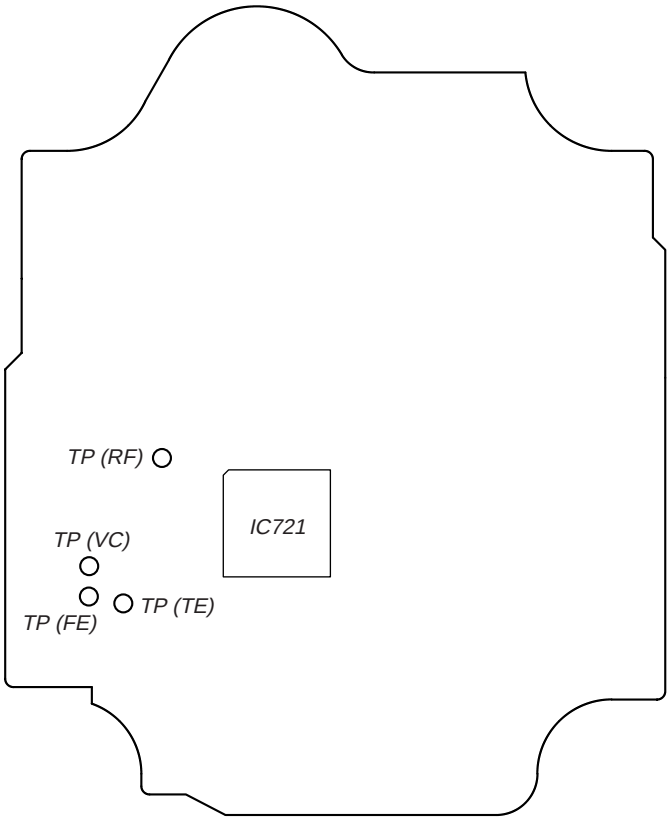
Procedure :
1. Connect an oscilloscope to TP (RF) and TP (VC).
2. Turn the power on.
3. Load a disc (YEDS-18) and playback.
4. Confirm that oscilloscope waveform is clear and check if RF signal level is correct or not.

Note: Clear RF signal waveform means that the shape " ◊ " can be clearly distinguished at the center of the waveform.



Connecting Location: BD board

– BD Board (Conductor side) –



SECTION 5
DIAGRAMS

5-1. IC PIN DESCRIPTIONS

• IC309 BU2099FV (MULTI CONTROLLER) (MAIN BOARD)

Pin No.	Pin Name	I/O	Pin Description
1	VSS	—	Ground pin
2	NC	—	Not used. (Open)
3	DATA	I	Serial data input from the tape mechanism controller
4	CLOCK	I	Serial data transfer clock signal input from the system controller
5	LCK	I	Serial data latch pulse clock signal input from the system controller
6	$\overline{\text{REC}}$	O	Recording on/off control signal output "L": recording
7	$\overline{\text{BIAS}}$	O	Recording bias on/off control signal output "L": bias on
8	A/$\overline{\text{B}}$	O	Deck-A/B selection signal output to the deck-A/B select switch "L": deck-B, "H": deck-A
9	PB MUTE	O	Playback muting on/off control signal output to the recording/playback equalizer amplifier "H": muting on
10	$\overline{\text{REC MUTE}}$	O	Recording muting on/off control signal output to the recording/playback equalizer amplifier "L": muting on
11	TUNER MUTE	O	Tuner muting on/off control signal output to the tuner unit "H": muting on
12	LM-R (CD)	O	Loading motor drive signal output
13	LM-L (CD)	O	Loading motor drive signal output
14	TM-R (CD)	O	Table motor drive signal output
15	TM-L (CD)	O	Table motor drive signal output
16	SP RERAY	O	Front speaker on/off relay drive control signal output "L": front speaker on
17	LINK/MATRIX	O	Surround speaker on/off relay drive control signal output "H": surround speaker on
18	SO	O	Serial data output to the bass boost controller
19	$\overline{\text{OE}}$	—	Not used. (Connect to ground.)
20	VDD	—	Power supply pin (+3.3 V)

• IC310 BU2099FV (BASS BOOST CONTROLLER) (MAIN BOARD)

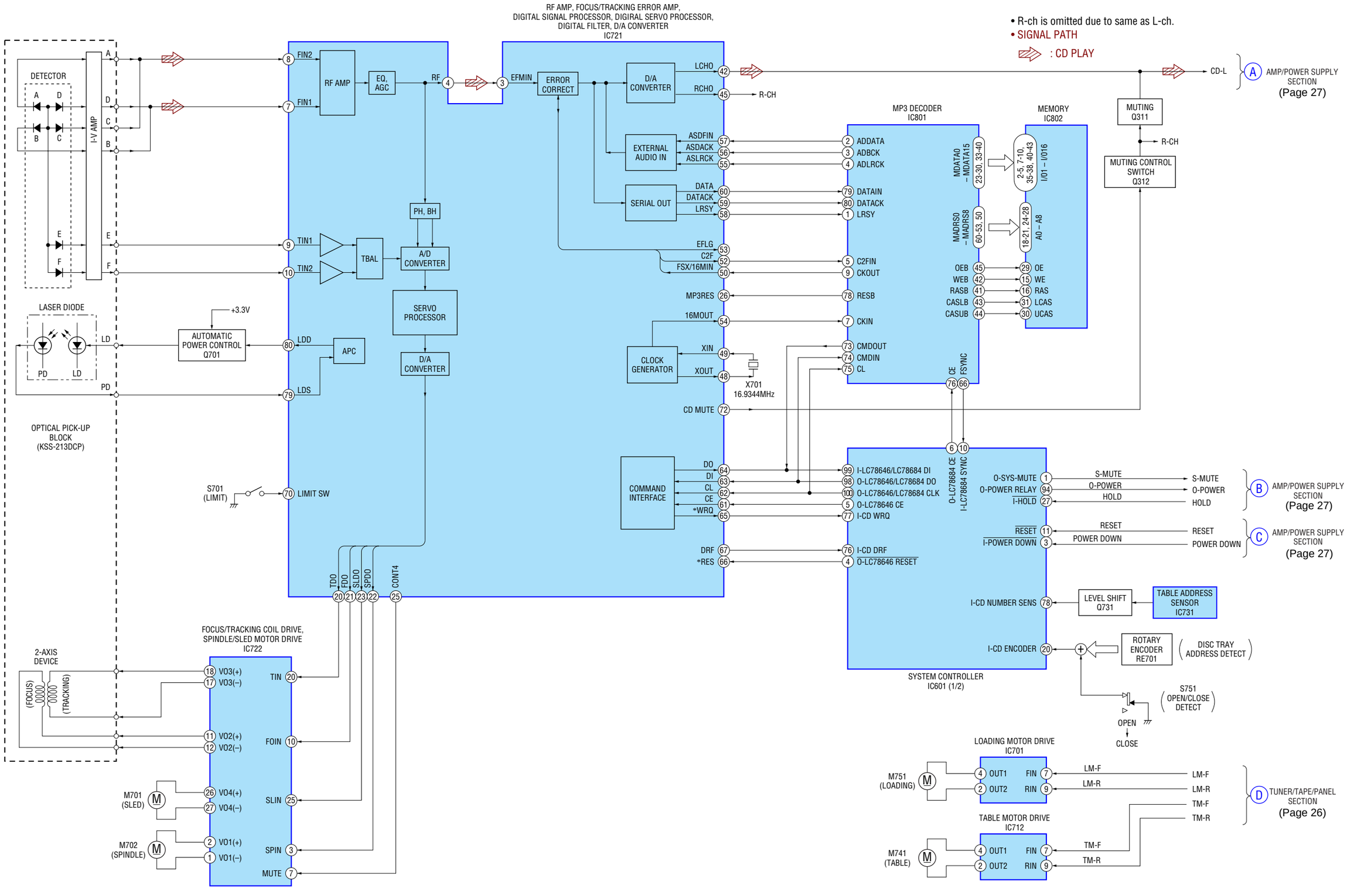
Pin No.	Pin Name	I/O	Pin Description
1	VSS	—	Ground pin
2	NC	—	Not used. (Open)
3	DATA	I	Serial data input from the multi controller
4	CLOCK	I	Serial data transfer clock signal input from the system controller
5	LCK	I	Serial data latch pulse clock signal input from the system controller
6 to 8	NC	—	Not used. (Open)
9	MOTOR VCC	O	Motor power control signal output “L”: motor power on
10	SOL A	O	SOL-A control signal output
11	SOL B	O	SOL-B control signal output
12	LINE OUT MUTE	O	Line out mute signal output terminal “H”: mute on Not used in this set. (Open)
13	CD MUTE	O	CD mute signal output terminal “H”: mute on Not used in this set. (Open)
14 to 16	CONT 1 to 3	O	Bass boost control signal output “H”: bass boost
17	NC	—	Not used. (Open)
18	SO	O	Serial data output Not used. (Open)
19	$\overline{OE}$	—	Not used. (Connect to ground.)
20	VDD	—	Power supply pin (+3.3 V)

• IC601 LC876780B-51Y0-E (SYSTEM CONTROL, FLD CONTROL) (PANEL BOARD)

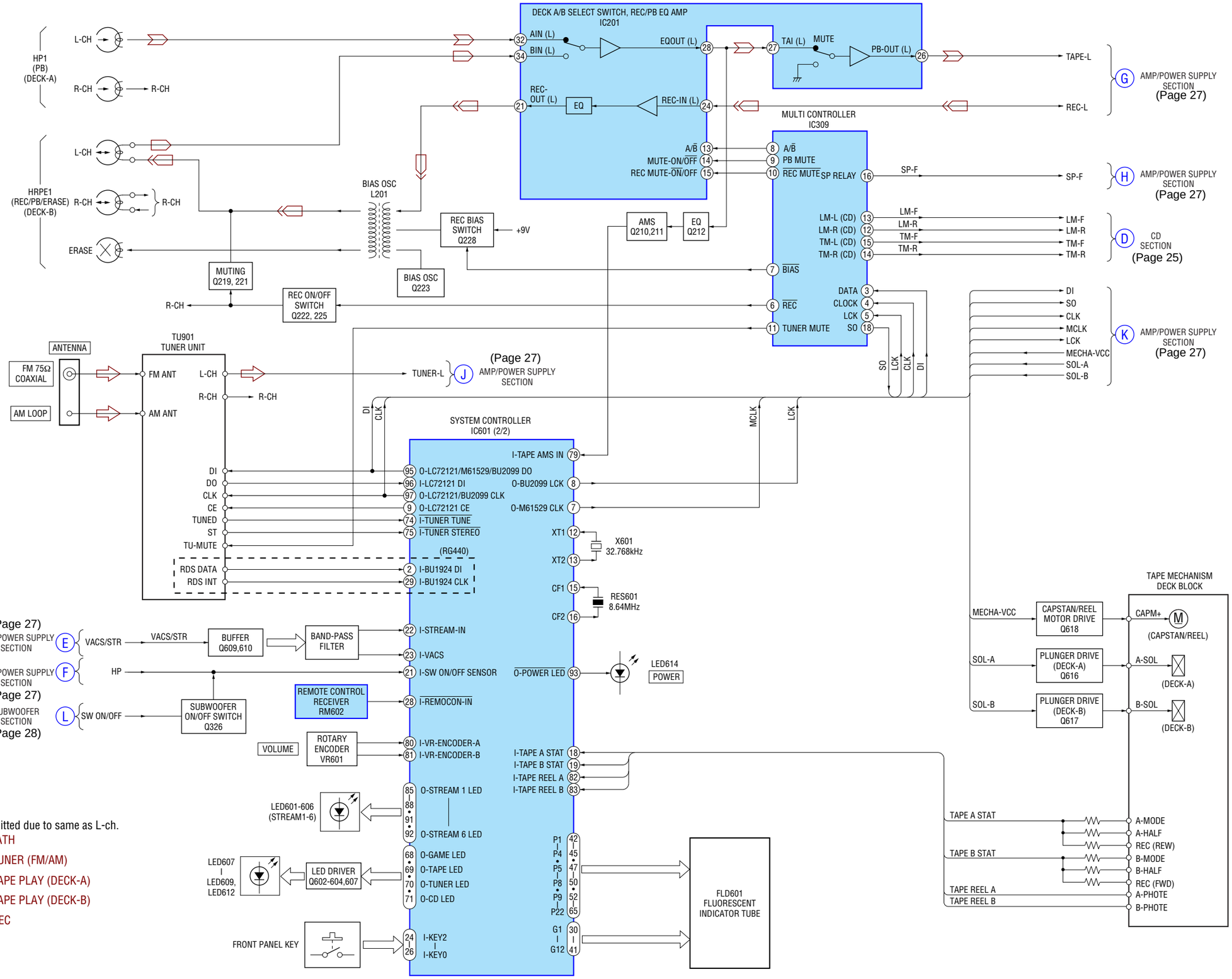
Pin No.	Pin Name	I/O	Pin Description
1	SYS MUTE	O	System mute signal output
2	BU1924 DATA	I	GX45: Not used. (Connected to ground.) RG440: Serial data signal input
3	PWR DOWN	I	Power down signal input
4	LC78646 RESET	O	CD reset signal output
5	LC78646 CE	O	CD CE signal output
6	LC78684 CE (MP3)	O	CD CE (MP3) signal output
7	M61519 CLK	O	Clock signal output
8	BU2099FV LCK	O	LCK signal output
9	LC72121 CE	O	CE signal output
10	LC78684 SYNC	I	SYNC signal input
11	RESET	I	Reset signal input from the IC603
12	XT1	I	Oscillater connect pin (32.768 kHz)
13	XT2	O	Oscillater connect pin (32.768 kHz)
14	VSS1	—	Ground pin
15	CF1	I	Ceramic vibrator connect pin (8.64 MHz)
16	CF2	O	Ceramic vibrator connect pin (8.64 MHz)
17	VDD1	—	Power supply pin (+3.3 V)
18	TAPE A STAT	I	Tape A start signal input
19	TAPE B STAT	I	Tape B start signal input
20	CD ENCODER	I	CD encoder switch signal input
21	SW ON/OFF SENSOR	I	Switch control on/off signal input
22	STREAM IN	I	Stream in signal input
23	VACS	I	VACS signal input
24	KEY2	I	Key signal input 2
25	KEY1	I	Key signal input 1
26	KEY0	I	Key signal input 0
27	PROTECTOR (HOLD)	I	Protector (Hold) signal input
28	REMOCON IN	I	Remote control signal input from the RM602
29	BU1924 CLK	I	GX45: Not used. (Connected to ground.) RG440: Serial clock signal input
30 to 41	G12 – G1	O	FLD control signal output
42 to 45	P1 – P4	O	FLD control signal output
46	VDD3	—	Power supply pin (+3.3 V)
47 to 50	P5 – P8	O	FLD control signal output
51	VPP	—	Ground pin
52 to 55	P9 – P12	O	FLD control signal output
56	SW1 (a) P13	O	FLD control signal output
57	SW2 (b) P14	O	FLD control signal output
58	SW3 (c) P15	O	FLD control signal output
59	SW4 (d) P16	O	FLD control signal output
60	SW5 P17	O	FLD control signal output
61	SW6 P18	O	FLD control signal output
62	SW7 P19	O	FLD control signal output
63	SW8 P20	O	FLD control signal output
64, 65	P21, P22	O	FLD control signal output
66	ENTER LED	O	Not used in this set. (Open)
67	MD/VIDEO LED	O	Not used in this set. (Open)
68	GAME LED	O	GAME LED (LED612) drive signal output
69	TAPE LED	O	TAPE A/B LED (LED609) drive signal output
70	TUNER LED	O	TUNER/BAND LED (LED608) drive signal output
71	CD LED	O	CD LED (LED607) drive signal output
72	VDD4	—	Power supply pin (+3.3 V)
73	CD VDD	O	CD power control signal output

Pin No.	Pin Name	I/O	Pin Description
74	TUNER TUNED	I	Tuner tuning signal input from the tuner unit
75	TUNER STEREO	I	Tuner stereo signal input from the tuner unit
76	CD DRF	I	CD DRF signal input
77	CD WRQ	I	CD WRQ signal input
78	CD NUMBER SENSOR	I	CD number sensor signal input
79	TAPE AMS IN	I	Tape AMS signal input
80	VR ENCODER A	I	VR encoder (VR601) signal input
81	VR ENCODER B	I	VR encoder (VR601) signal input
82	TAPE REEL A	I	Tape reel A signal input
83	TAPE REEL B	I	Tape reel B signal input
84	MODE SW IN	I	Mode switch signal input
85	STREAM 1 LED	O	Stream LED drive signal output
86	STREAM 2 LED/CD MUTE	O	Stream LED drive signal output
87	STREAM 3 LED	O	Stream LED drive signal output
88	STREAM 4 LED/ MECHA VCC	O	Stream LED drive signal output
89	VSS2	—	Ground pin
90	VDD2	—	Power supply pin (+3.3 V)
91	STREAM 5 LED/ TAPE SOL A	O	Stream LED drive signal output
92	STREAM 6 LED/ TAPE SOL B	O	Stream LED drive signal output
93	POWER LED	O	POWER LED (LED614) drive signal output
94	POWER RELAY	O	Power relay signal output
95	LC72121/M61529/ BU2099FV DO	O	Serial data signal output
96	LC72121 DI	I	Serial data signal input
97	LC72121/BU2099FV CLK	O	Serial clock signal output
98	LC78646/LC78684 DO	O	Serial data signal output
99	LC78646/LC78684 DI	I	Serial data signal input
100	LC78646/LC78684 CLK	O	Serial clock signal output

5-2. BLOCK DIAGRAM — CD SECTION —

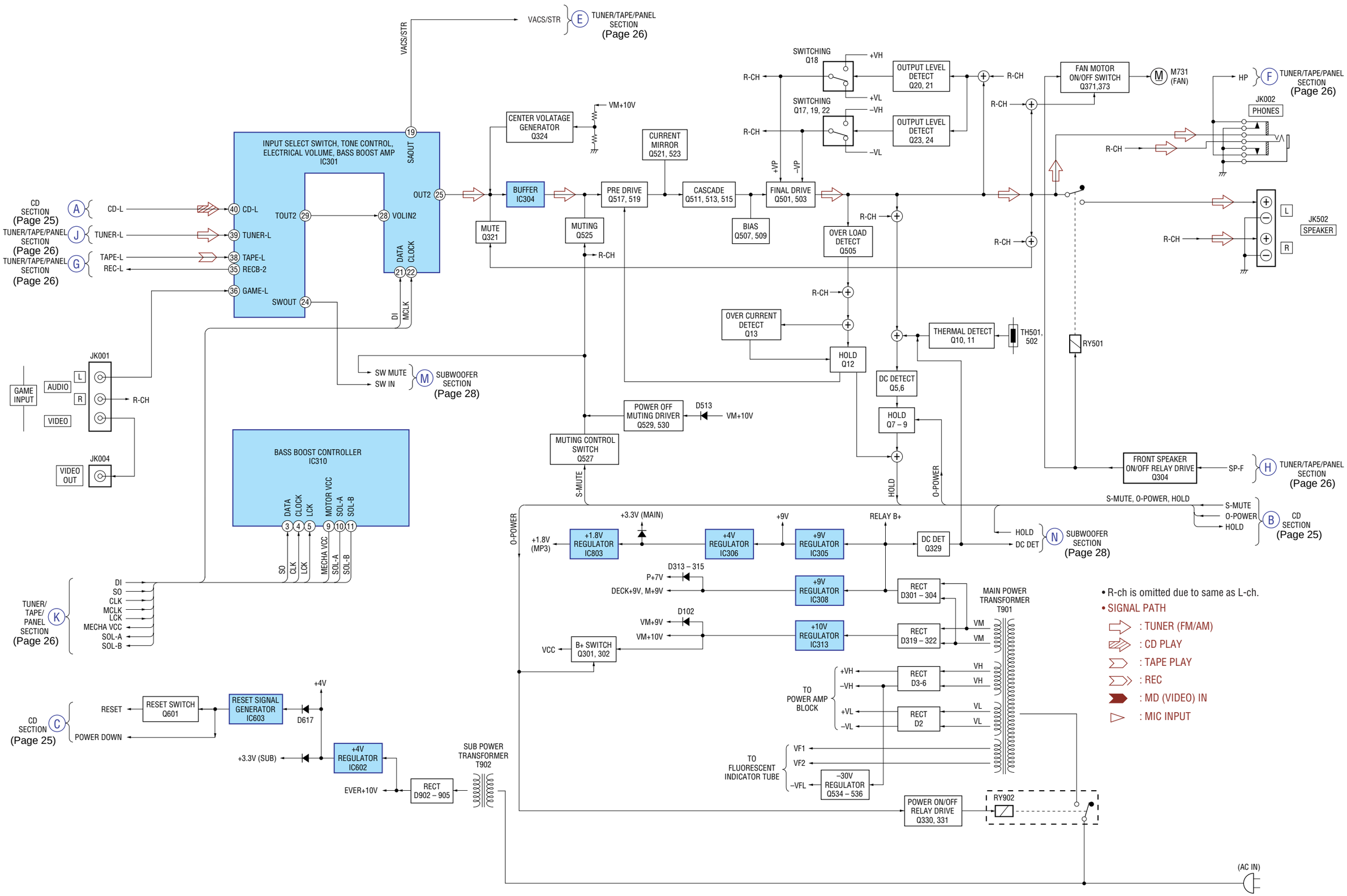


5-3. BLOCK DIAGRAM — TUNER/TAPE/PANEL SECTION —

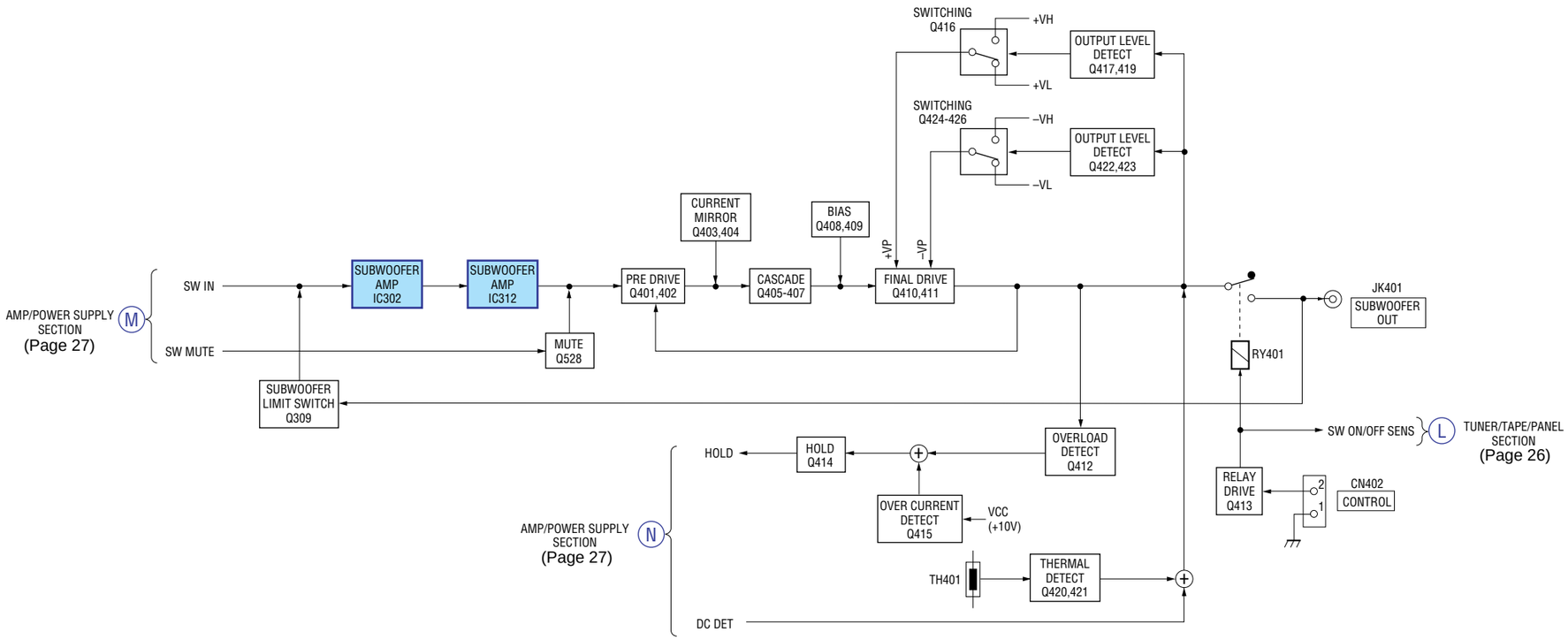


• R-ch is omitted due to same as L-ch.
• SIGNAL PATH
: TUNER (FM/AM)
: TAPE PLAY (DECK-A)
: TAPE PLAY (DECK-B)
: REC

5-4. BLOCK DIAGRAM — AMP/POWER SUPPLY SECTION —



5-5. BLOCK DIAGRAM — SUB WOOFER SECTION —



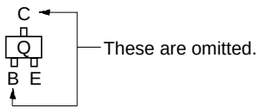
5-6. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

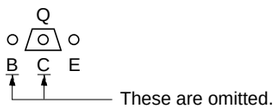
Note on Printed Wiring Board:

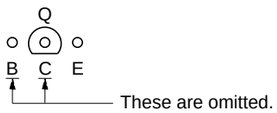
- ○——○ : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ▬ : Pattern from the side which enables seeing.
  (The other layer's patterns are not indicated.)

Caution:	
Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side)	Parts on the parts face side seen from the parts face are indicated.

- Indication of transistor.







Note on Schematic Diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- : nonflammable resistor.
- : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- ▬▬ : B+ Line.
- ▬ ▬ ▬ : B– Line.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : CD PLAY
  [ ] : TAPE PLAY (DECK-A)
  { } : TAPE PLAY (DECK-B)
  〈〈 〉〉 : REC
  ✻ : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  : TUNER (FM/AM)
  : CD PLAY
  : TAPE PLAY (DECK-A)
  : TAPE PLAY (DECK-B)
  : REC
  : MD (VIDEO) IN
  : MIC INPUT
- Abbreviation
  CND : Canadian model
  AUS : Australian model

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

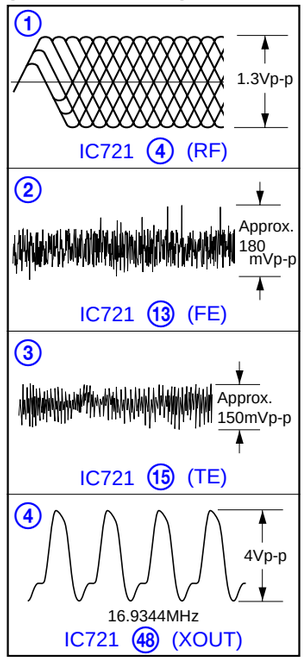
: LEAD FREE MARK

Unleaded solder has the following characteristics.

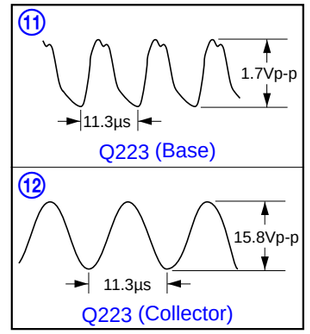
- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350 °C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscou-s (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

5-7. WAVEFORMS

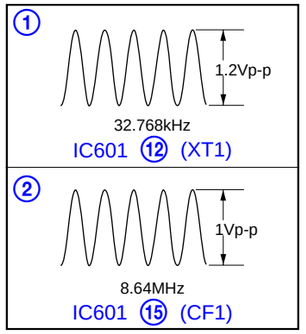
– BD Board –
(CD PLAY mode)



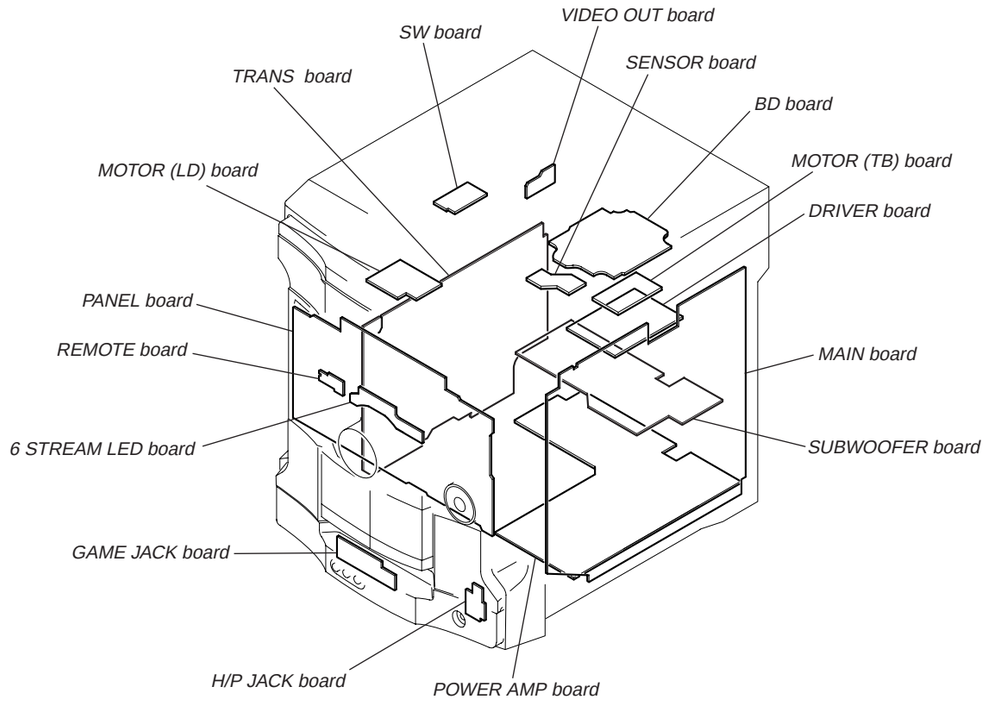
– MAIN Board –
(REC mode)



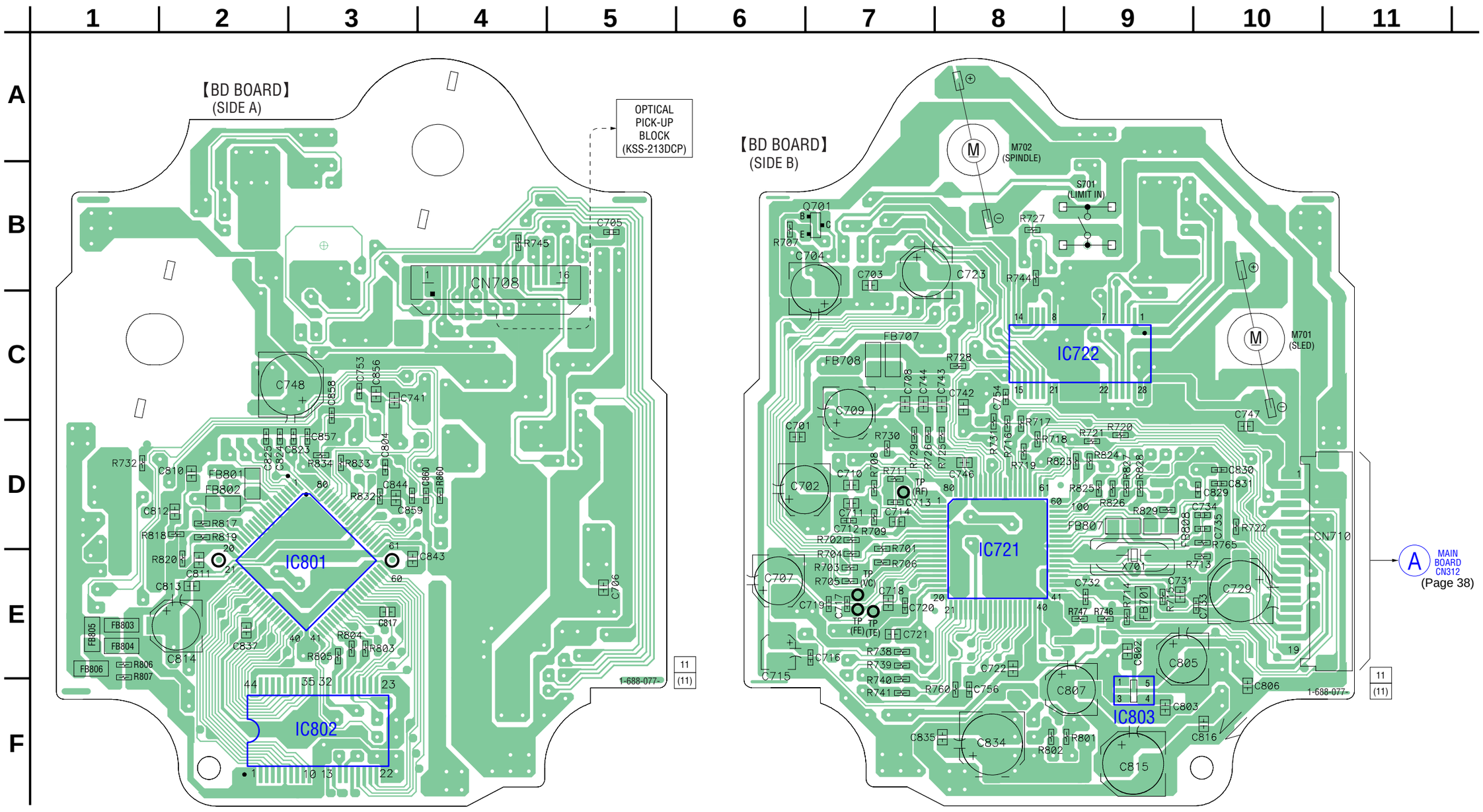
– PANEL Board –



5-8. CIRCUIT BOARDS LOCATION



5-9. PRINTED WIRING BOARD — CD MECHANISM SECTION (1/2) — • Refer to page 29 for Circuit Boards Location. : Uses unleaded solder.



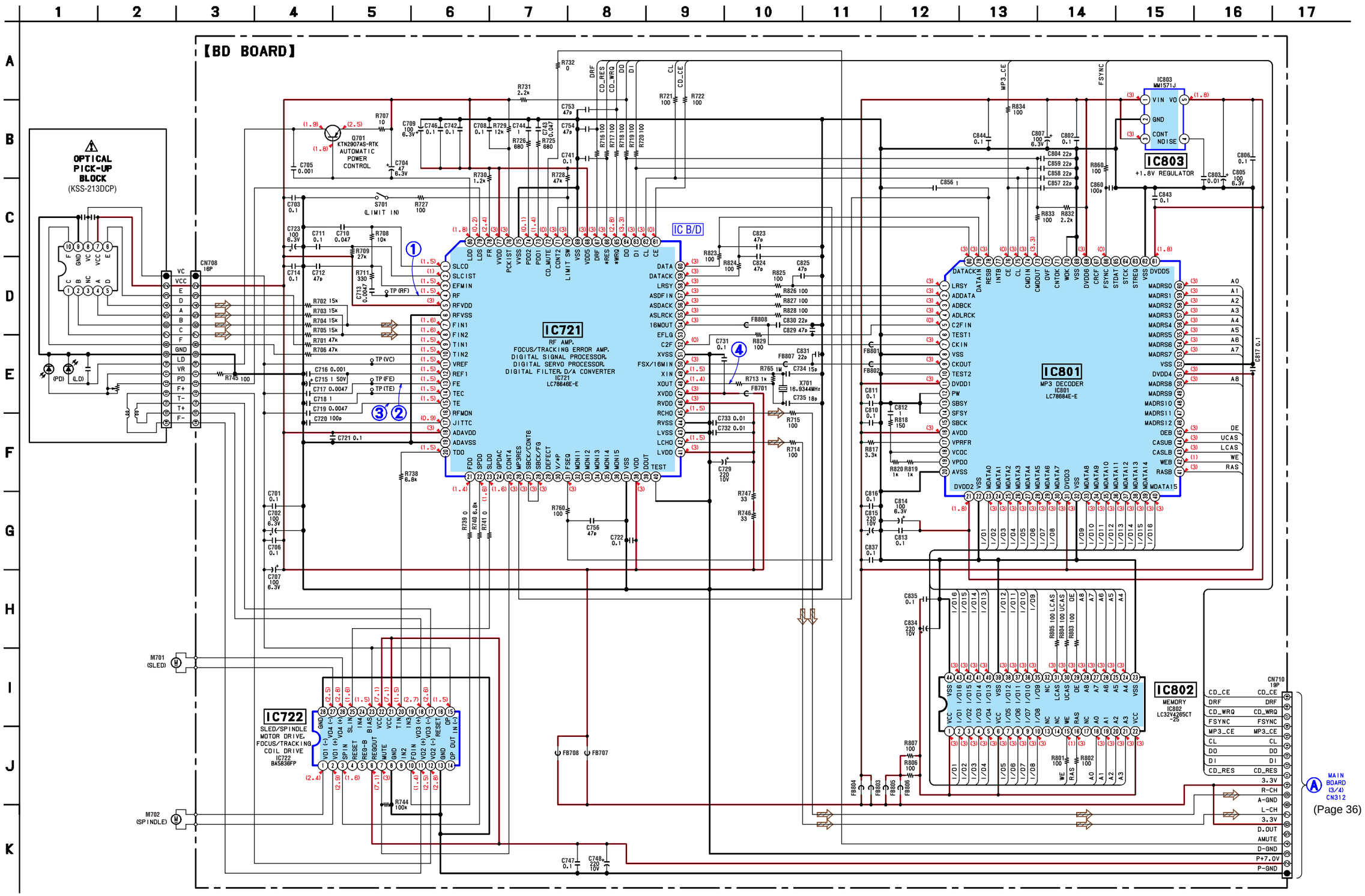
- **Semiconductor Location**

Ref. No.	Location
IC721	E-8
IC722	C-9
IC801	E-3
IC802	F-3
IC803	F-9
Q701	B-7

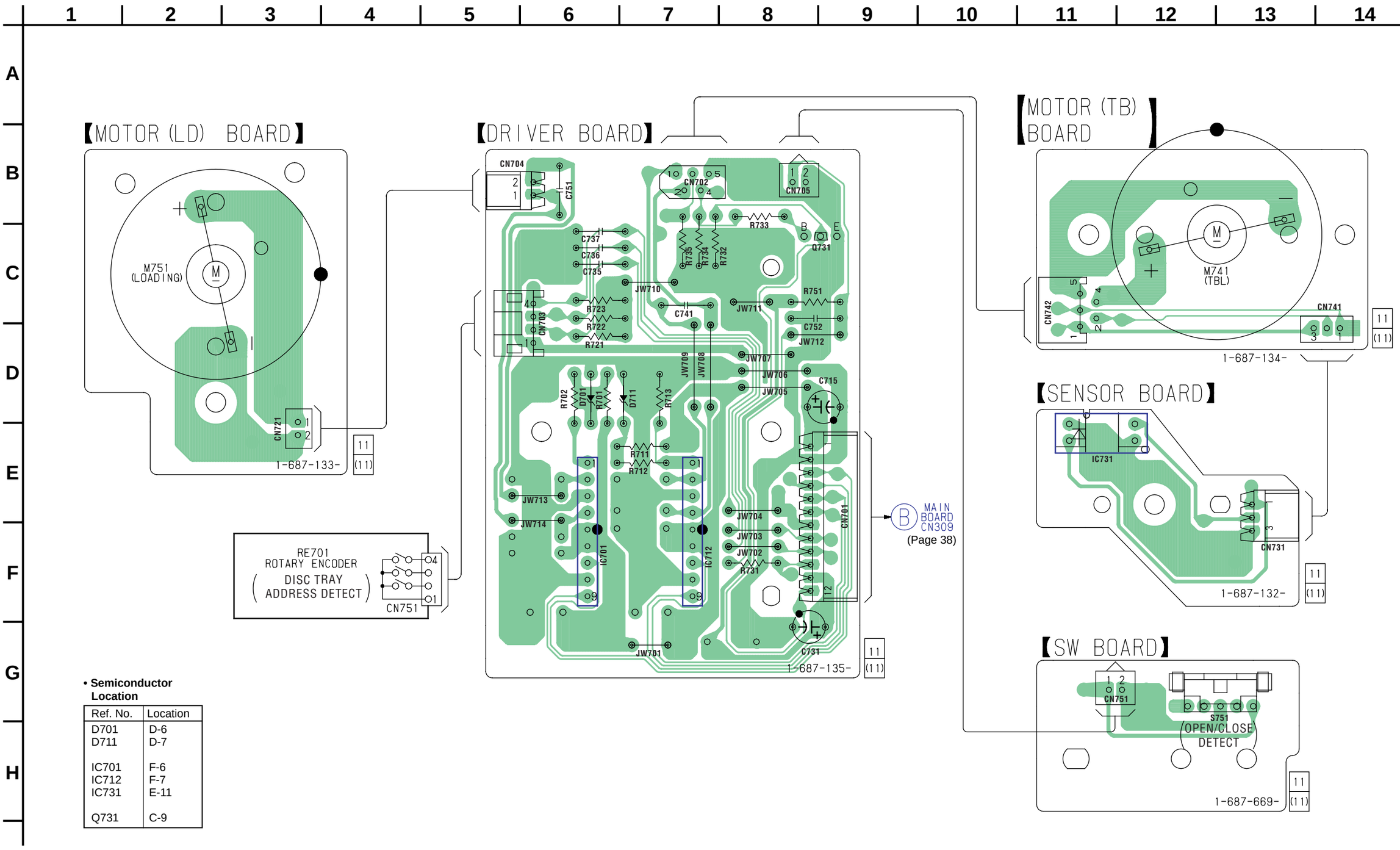
• Refer to page 29 for Waveforms.

5-10. SCHEMATIC DIAGRAM — CD MECHANISM SECTION (1/2) —

• Refer to page 49 for IC Block Diagrams.



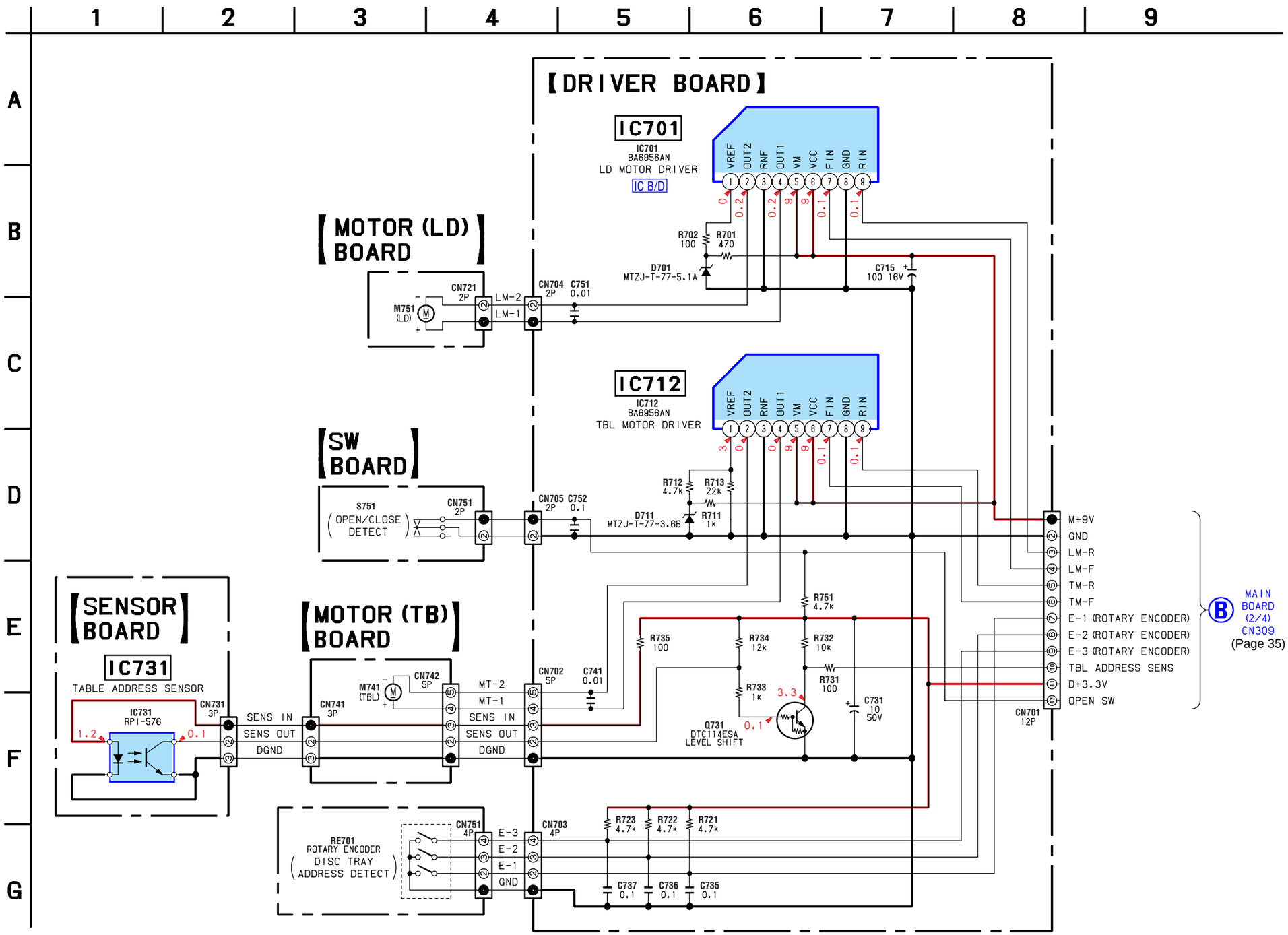
5-11. PRINTED WIRING BOARDS — CD MECHANISM SECTION (2/2) — • Refer to page 29 for Circuit Boards Location. : Uses unleaded solder.



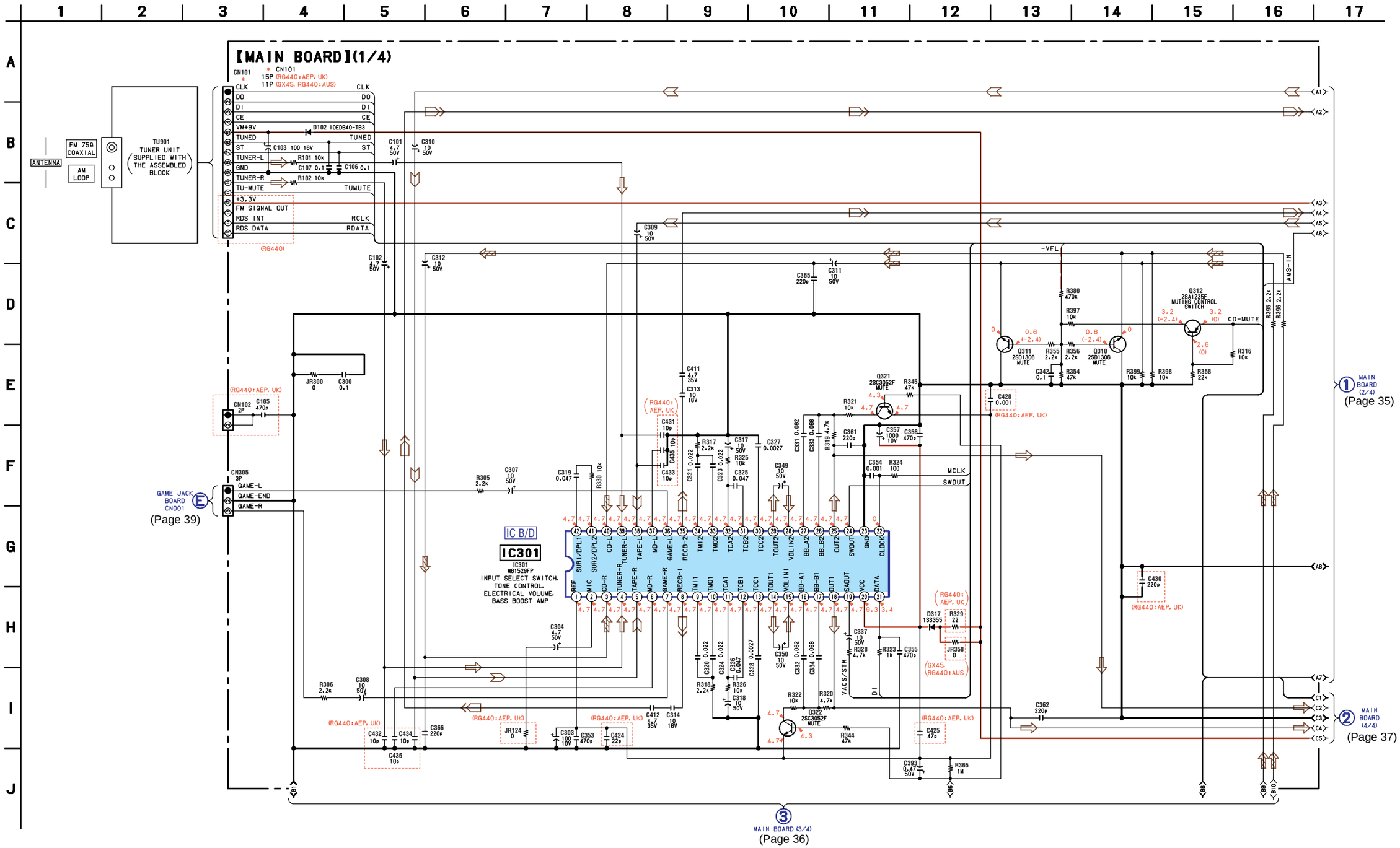
- **Semiconductor Location**

Ref. No.	Location
D701	D-6
D711	D-7
IC701	F-6
IC712	F-7
IC731	E-11
Q731	C-9

5-12. SCHEMATIC DIAGRAM — CD MECHANISM SECTION (2/2) — • Refer to page 50 for IC Block Diagrams.



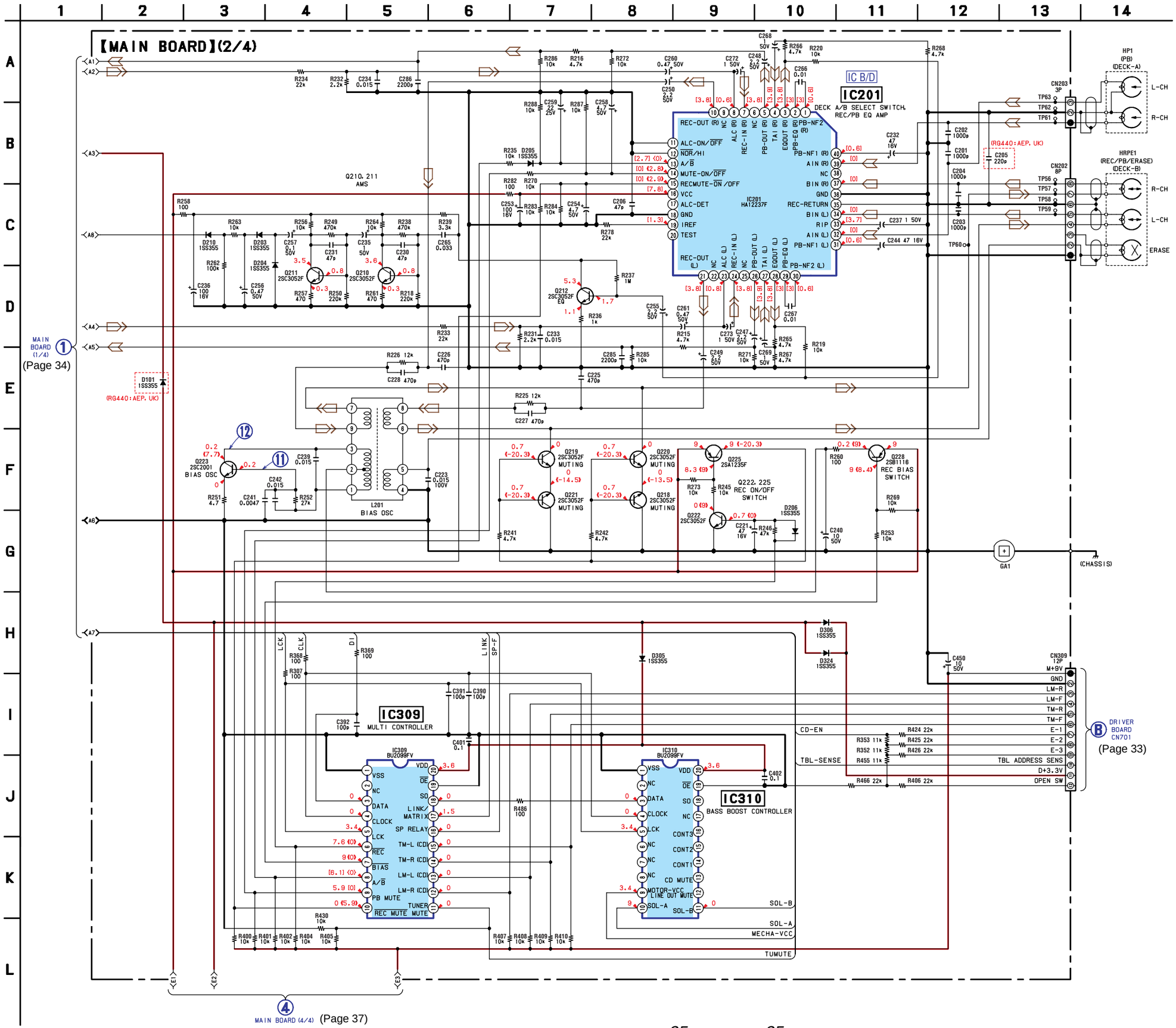
5-13. SCHEMATIC DIAGRAM — MAIN SECTION (1/4) — • Refer to page 50 for IC Block Diagram.



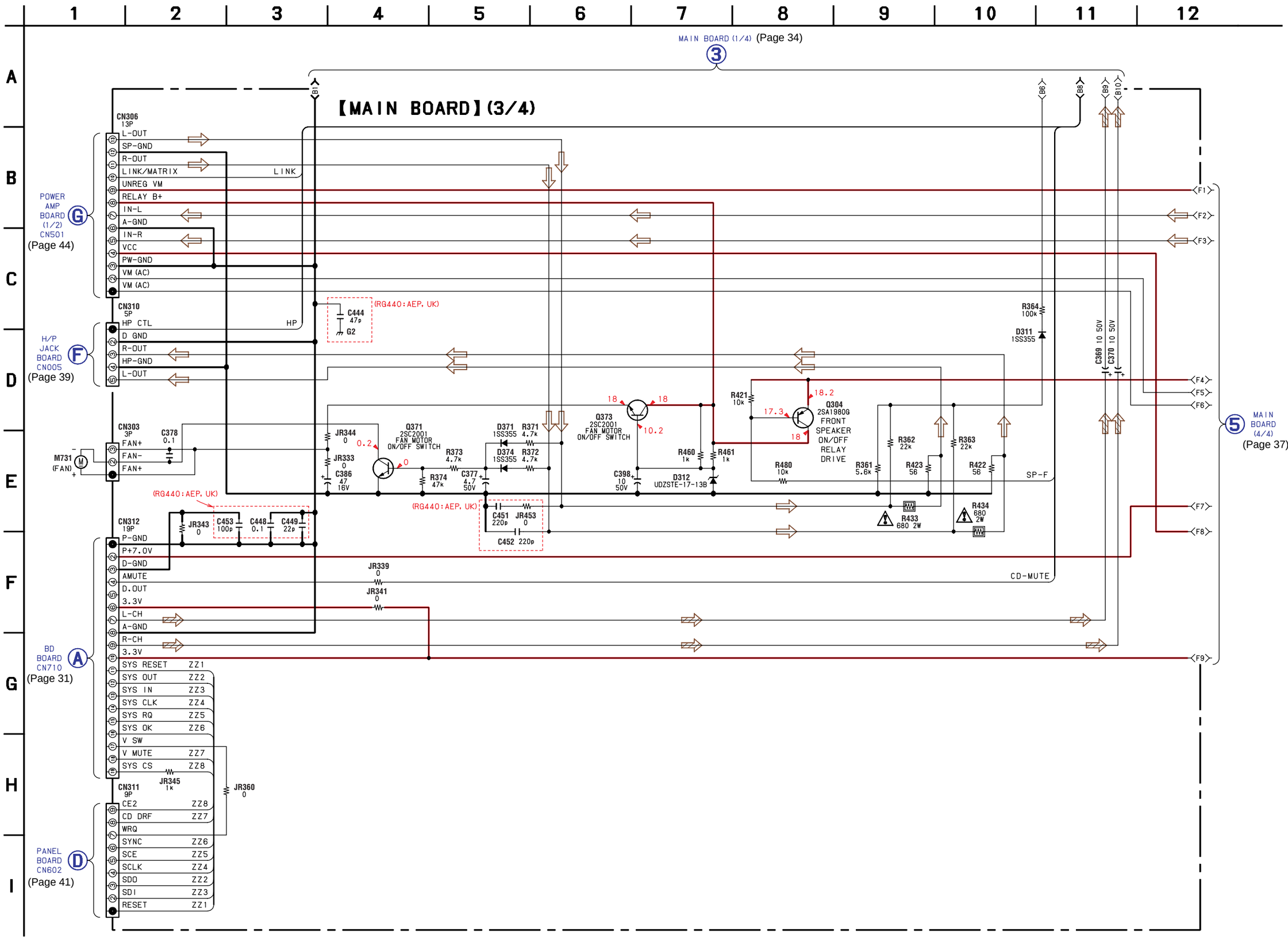
• Refer to page 29 for Waveforms.

5-14. SCHEMATIC DIAGRAM — MAIN SECTION (2/4) —

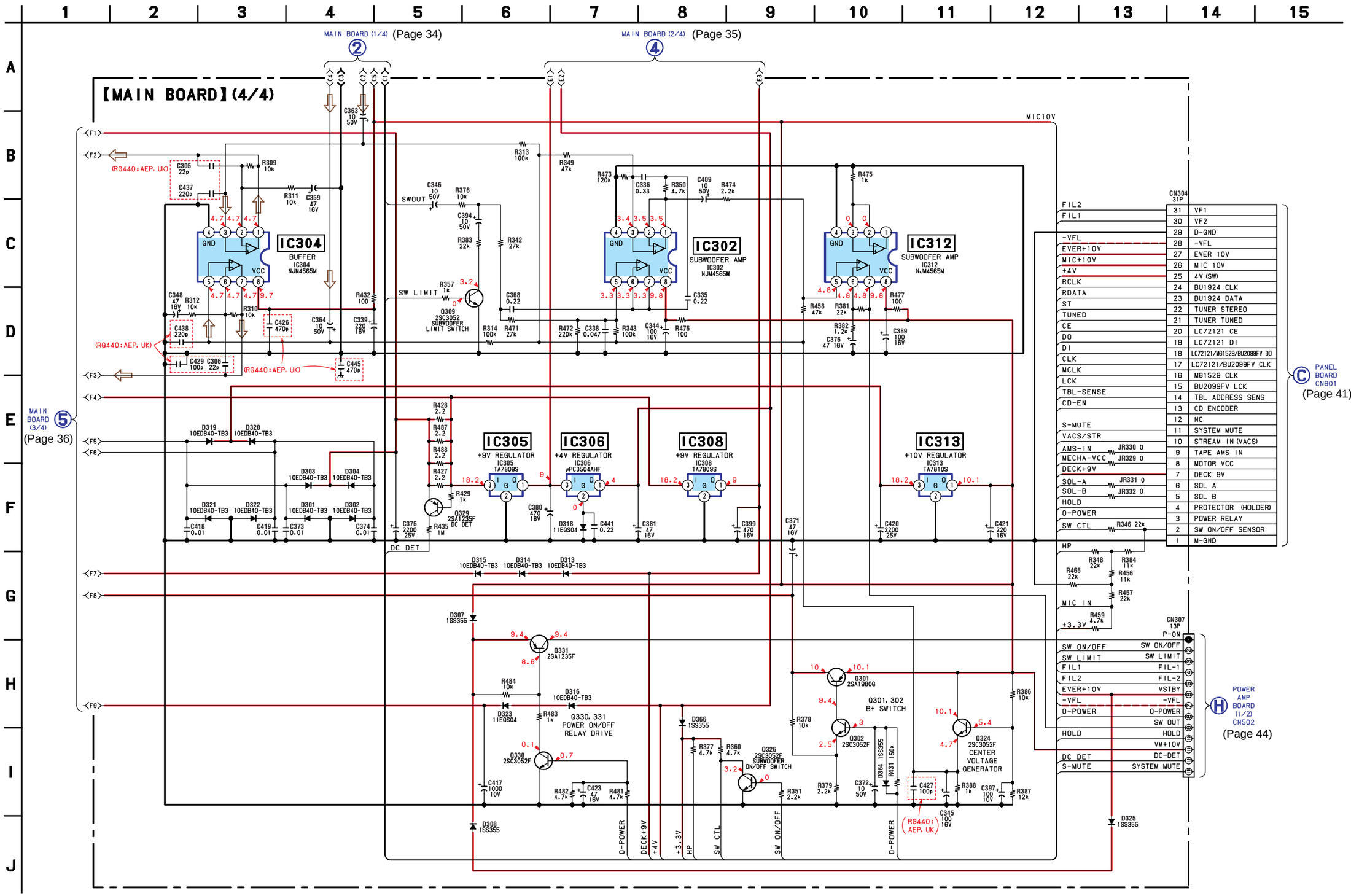
• Refer to page 51 for IC Block Diagram.



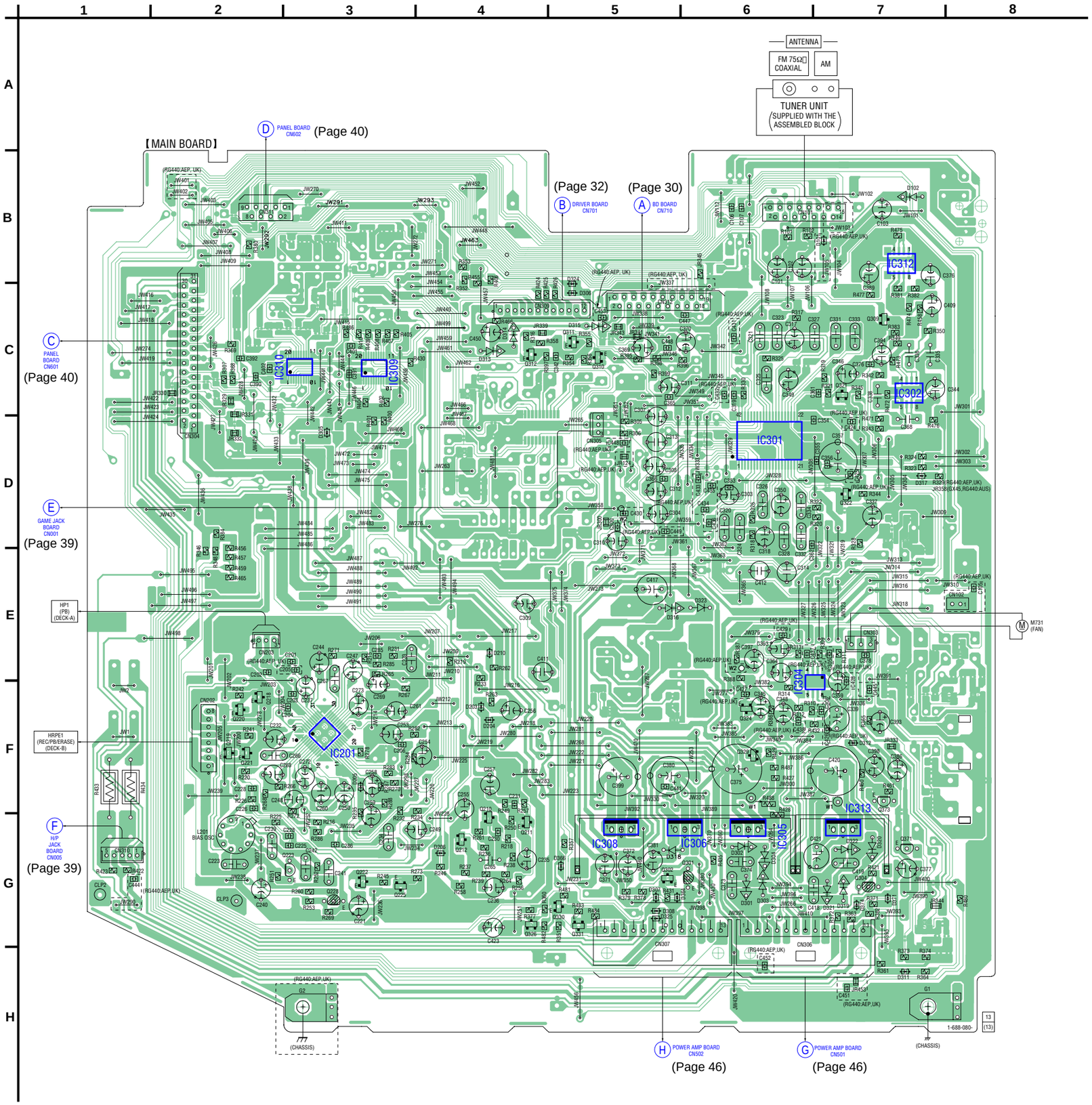
5-15. SCHEMATIC DIAGRAM — MAIN SECTION (3/4) —



5-16. SCHEMATIC DIAGRAM — MAIN SECTION (4/4) —



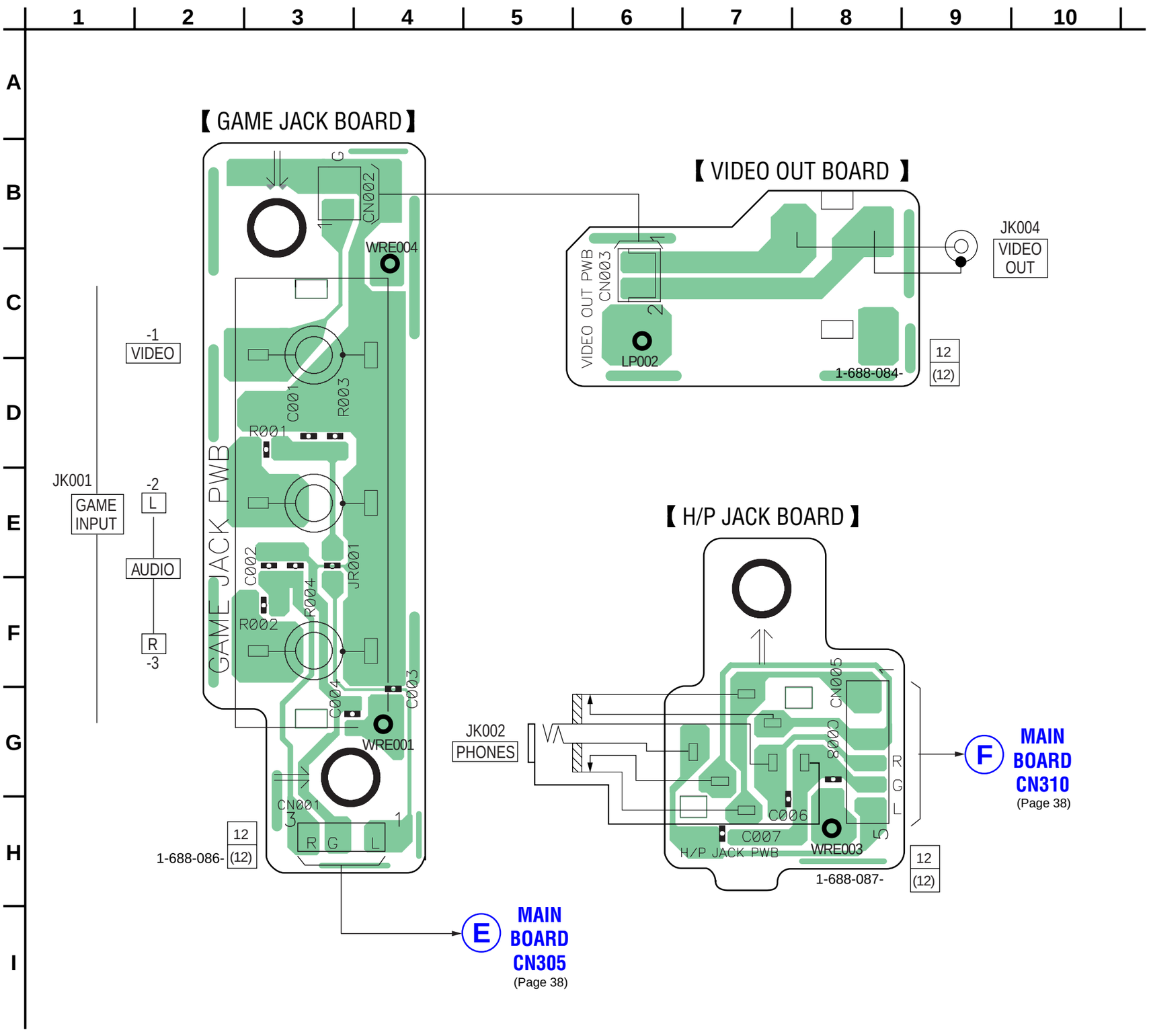
5-17. PRINTED WIRING BOARD — MAIN SECTION — • Refer to page 29 for Circuit Boards Location. : Uses unleaded solder.

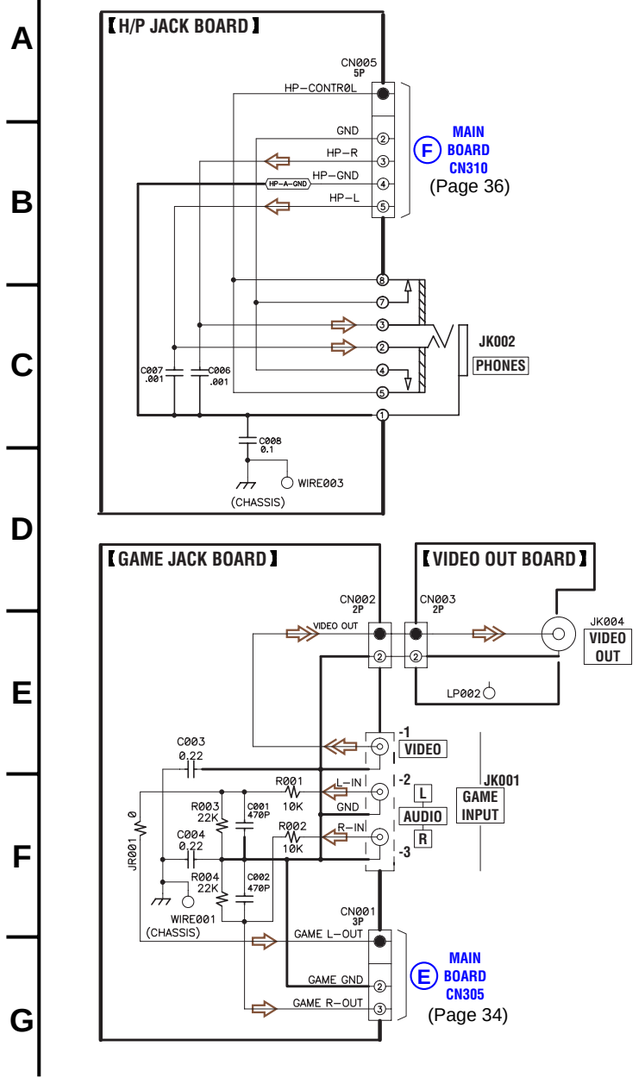


• **Semiconductor Location**

Ref. No.	Location
D101	B-7
D102	B-7
D203	F-4
D204	F-4
D205	F-3
D206	G-4
D210	E-4
D301	G-6
D302	G-6
D303	G-6
D304	G-6
D305	D-3
D306	C-5
D307	G-5
D308	G-5
D311	H-7
D312	F-7
D313	C-4
D314	C-4
D315	C-5
D316	E-5
D317	D-7
D318	G-5
D319	G-7
D320	G-7
D321	G-7
D322	G-7
D323	E-6
D324	C-5
D325	G-5
D364	G-5
D366	G-5
D371	G-7
D374	G-7
IC201	F-3
IC301	D-6
IC302	C-7
IC304	F-6
IC305	G-6
IC306	G-6
IC308	G-5
IC309	C-3
IC310	C-3
IC312	B-7
IC313	G-7
PH301	B-8
Q210	G-4
Q211	G-4
Q212	G-4
Q218	F-2
Q219	F-2
Q220	F-2
Q221	F-2
Q222	G-3
Q223	G-3
Q225	G-3
Q228	G-3
Q301	G-6
Q302	G-5
Q304	G-7
Q309	C-7
Q310	C-5
Q311	C-5
Q312	C-4
Q321	C-7
Q322	D-7
Q324	F-6
Q326	G-4
Q329	F-6
Q330	G-5
Q331	G-5
Q371	G-7
Q373	F-7

5-18. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAM — JACK SECTION — • Refer to page 29 for Circuit Boards Location.

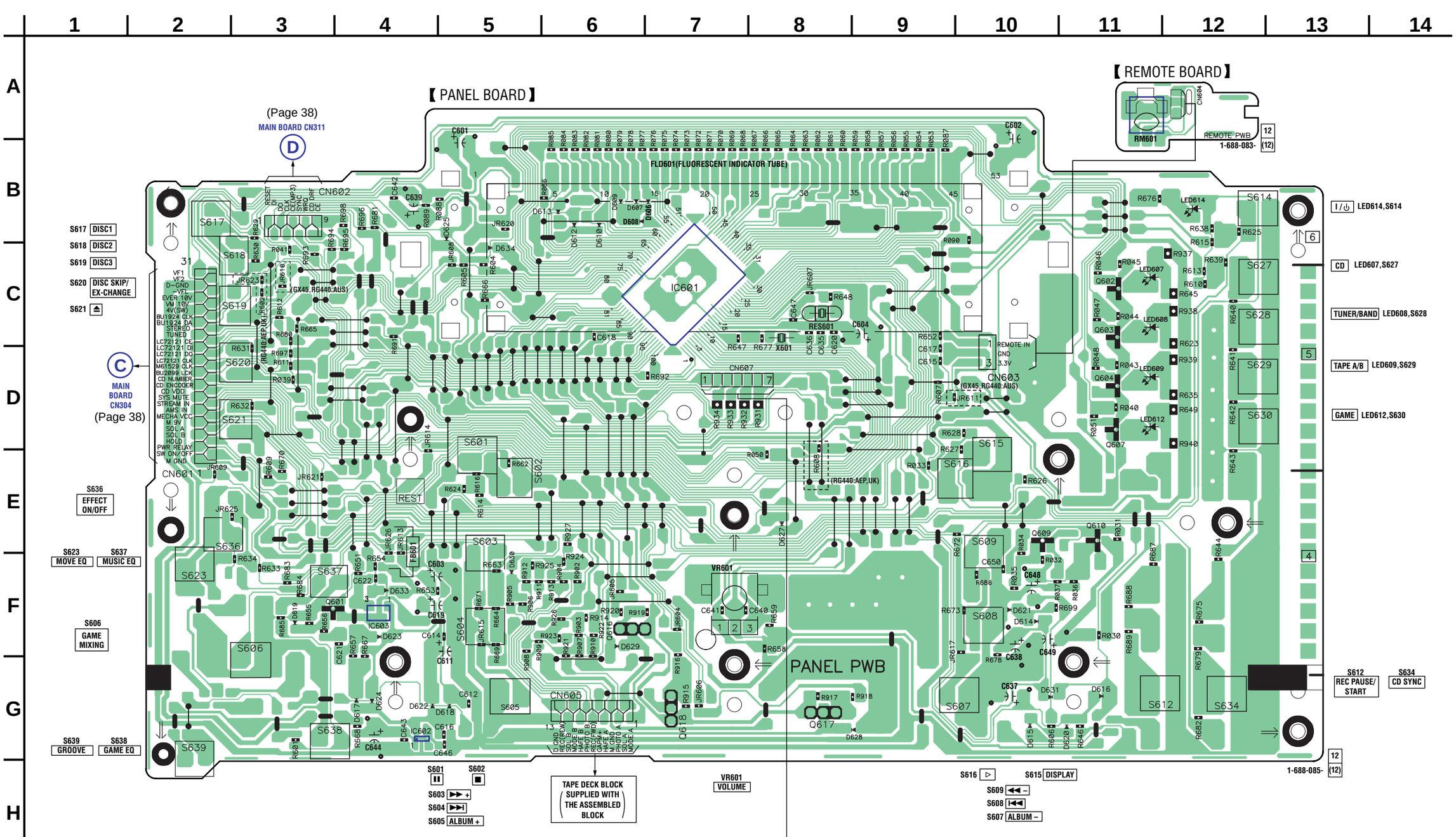




5-19. PRINTED WIRING BOARDS — PANEL SECTION —

• Refer to page 29 for Circuit Boards Location.

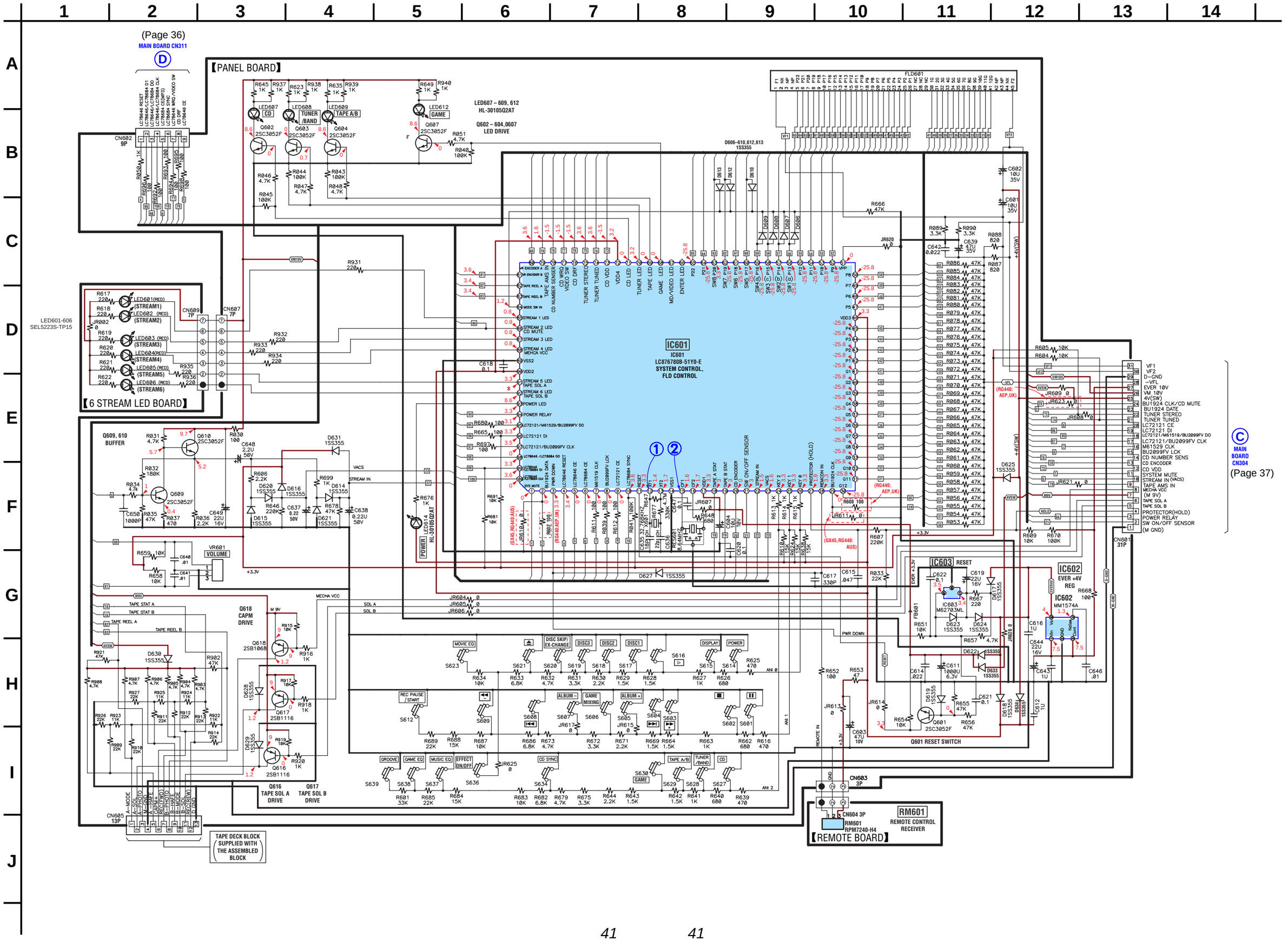
: Uses unleaded solder.



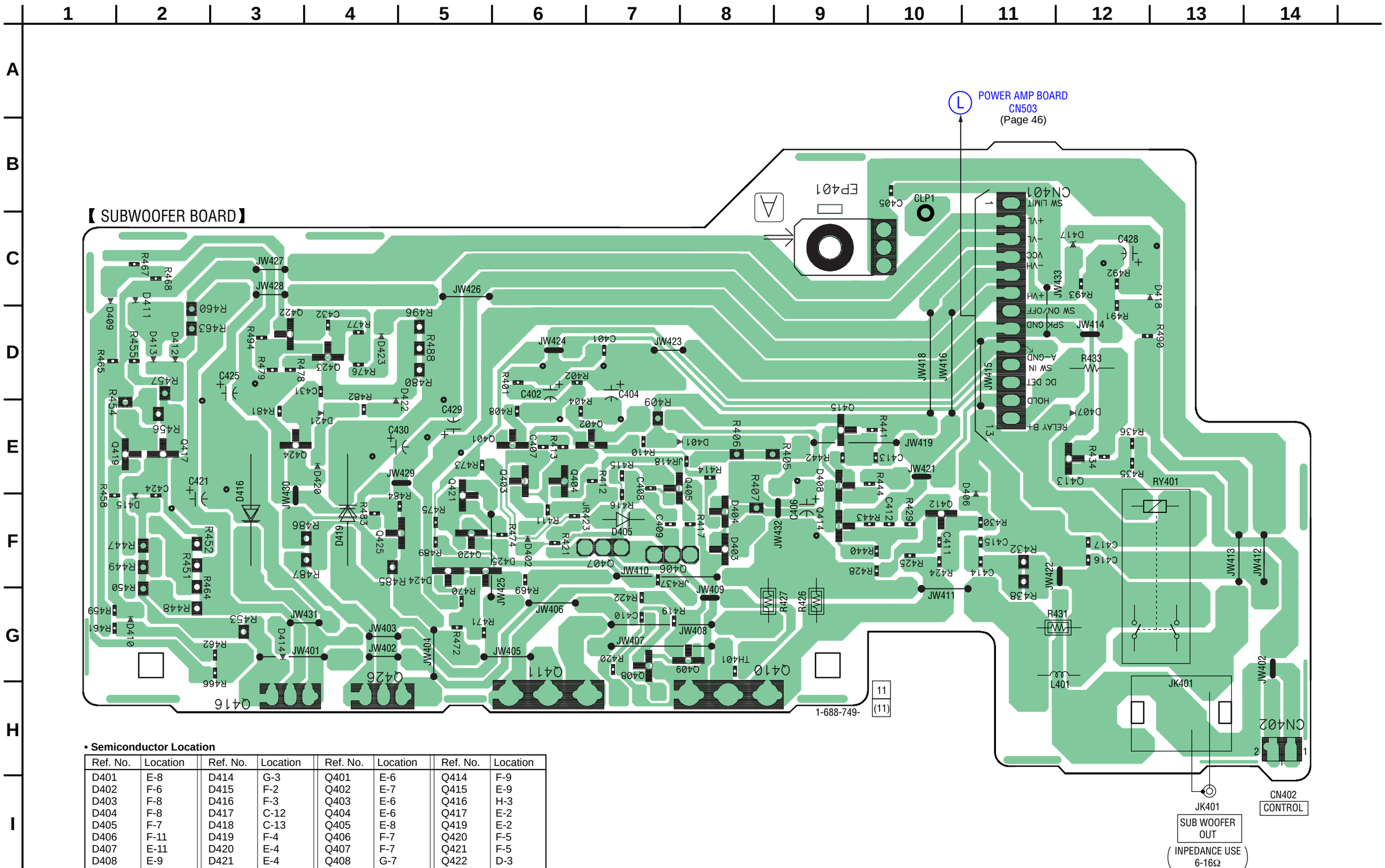
• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D606	B-7	D621	F-10	IC602	G-4	Q601	F-3
D607	B-6	D622	G-4	IC603	F-4	Q602	C-11
D608	B-6	D623	F-4			Q603	C-11
D609	B-6	D624	G-4	LED601	I-11	Q604	D-11
D610	B-6	D625	B-5	LED602	I-10	Q607	D-11
D612	B-6	D627	E-8	LED603	I-10	Q609	E-10
D613	B-6	D628	G-9	LED604	I-10	Q610	E-11
D614	F-10	D629	F-6	LED605	I-9	Q616	F-6
D615	G-10	D630	F-5	LED606	I-9	Q617	G-8
D616	G-11	D631	G-10	LED607	C-11	Q618	G-7
D617	G-4	D633	F-4	LED608	C-11		
D618	G-5	D634	C-5	LED609	D-11	RM601	A-11
D619	F-3			LED612	D-11		
D620	G-11	IC601	C-7	LED614	B-12		

5-20. SCHEMATIC DIAGRAM — PANEL SECTION — • Refer to page 29 for Waveforms.



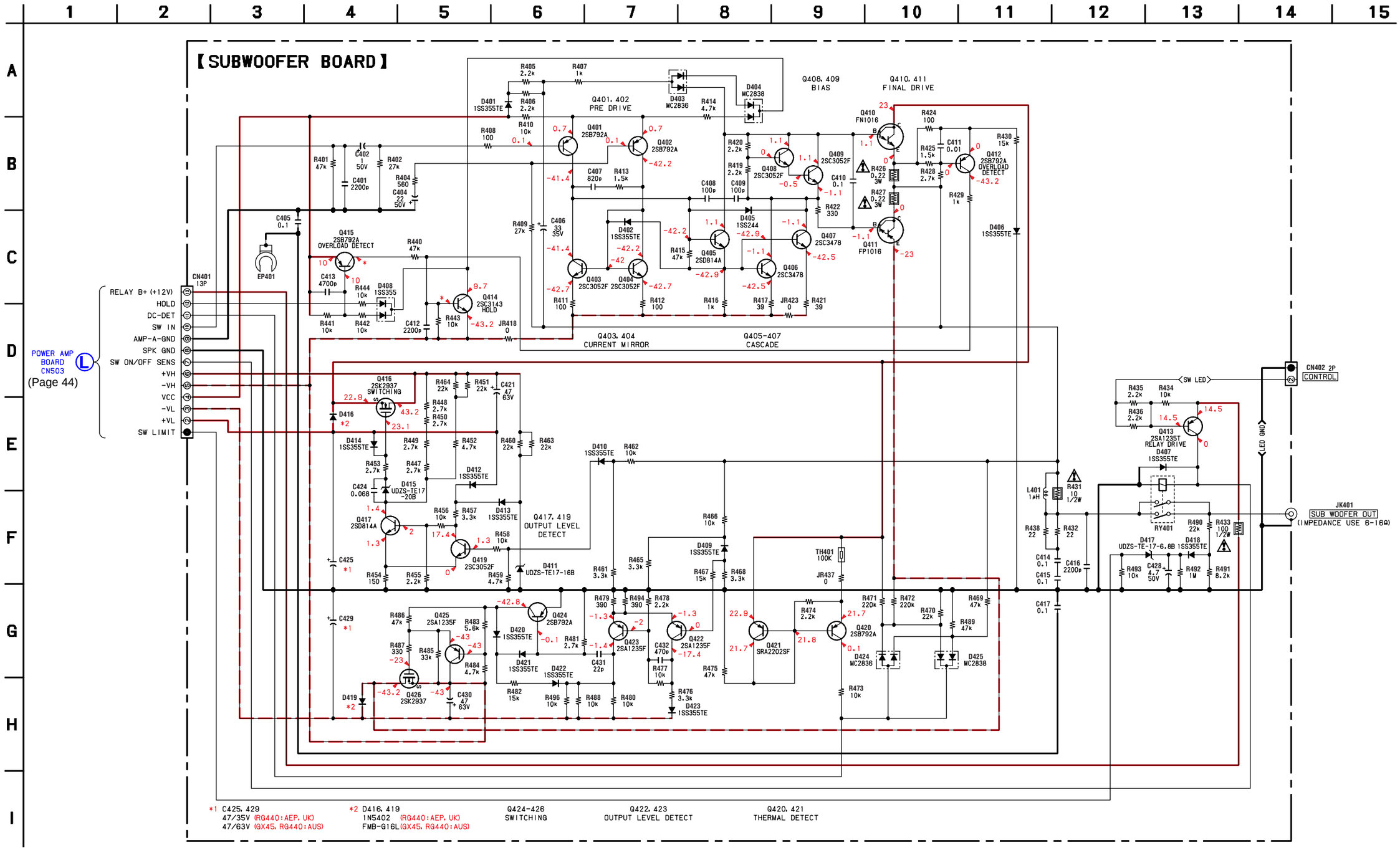
5-21. PRINTED WIRING BOARD — SUB WOOFER SECTION — • Refer to page 29 for Circuit Boards Location. : Uses unleaded solder.



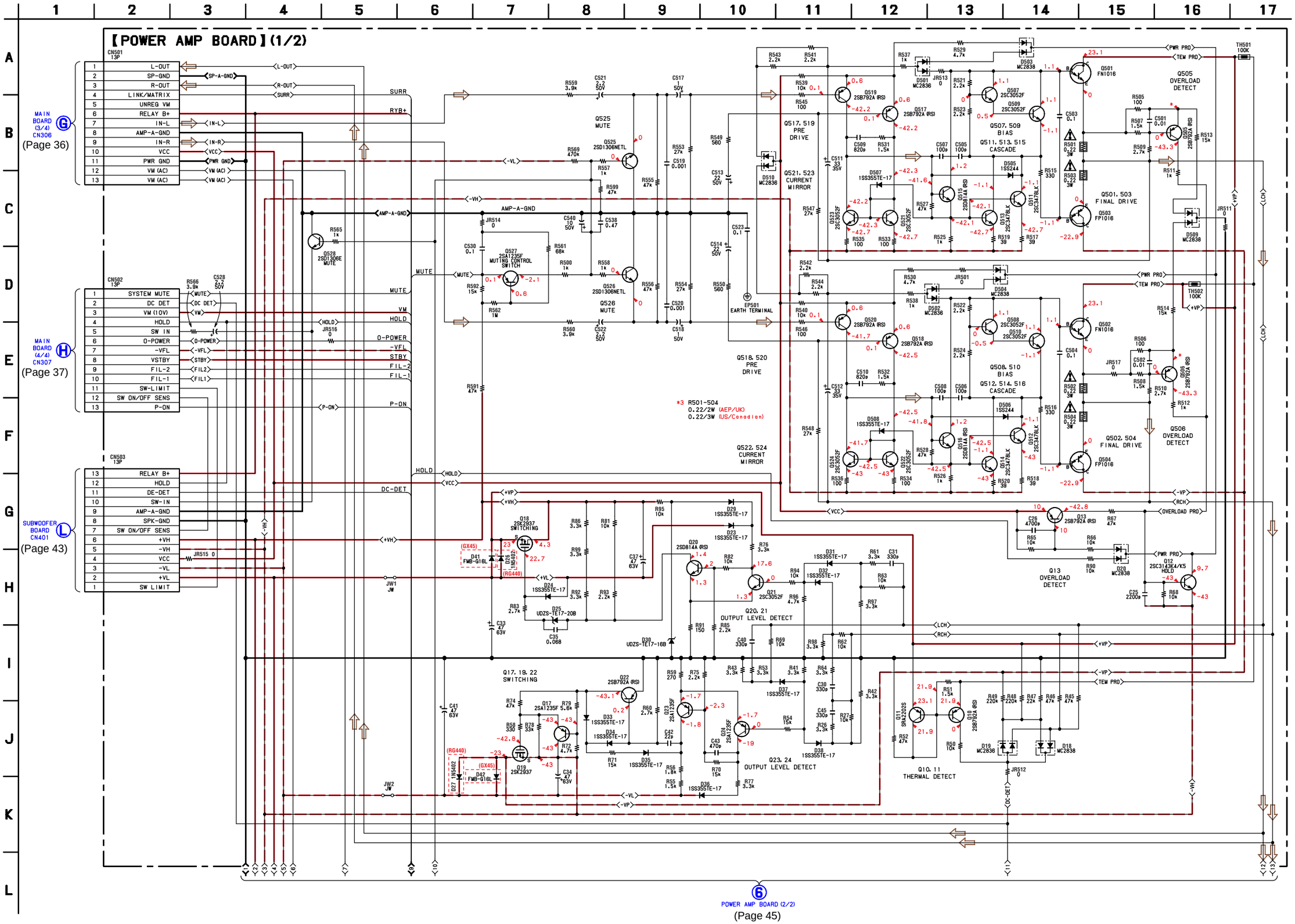
• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D401	E-8	D414	G-3	Q401	E-6	Q414	F-9
D402	F-6	D415	F-2	Q402	E-7	Q415	E-9
D403	F-8	D416	F-3	Q403	E-6	Q416	H-3
D404	F-8	D417	C-12	Q404	E-6	Q417	E-2
D405	F-7	D418	C-13	Q405	E-8	Q419	E-2
D406	F-11	D419	F-4	Q406	F-7	Q420	F-5
D407	E-11	D420	E-4	Q407	F-7	Q421	F-5
D408	E-9	D421	E-4	Q408	G-7	Q422	D-3
D409	D-1	D422	E-5	Q409	G-8	Q423	D-4
D410	G-2	D423	D-4	Q410	H-8	Q424	E-3
D411	C-2	D424	F-5	Q411	H-6	Q425	F-4
D412	D-2	D425	F-6	Q412	F-10	Q426	H-3
D413	D-2			Q413	E-12		

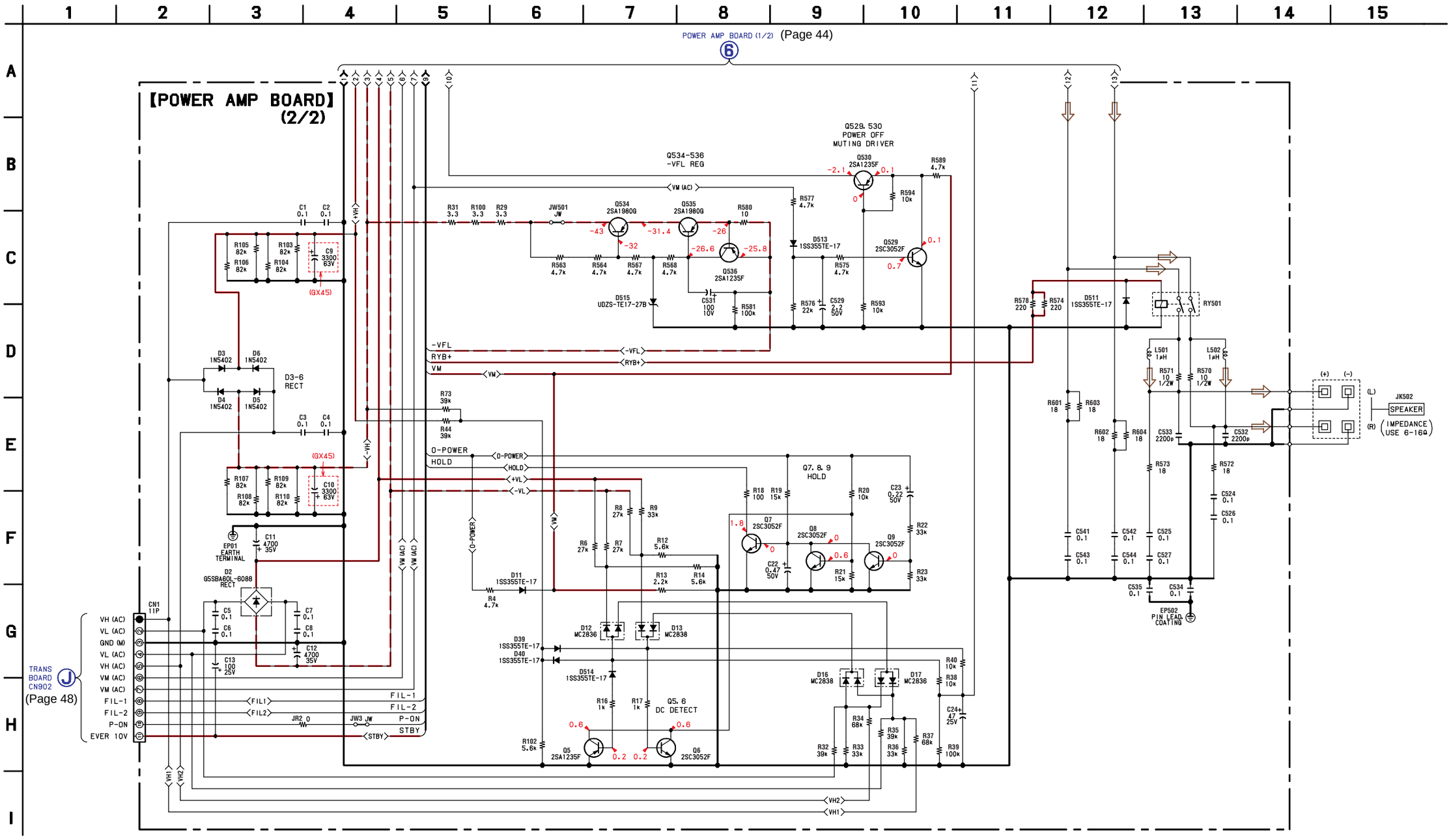
5-22. SCHEMATIC DIAGRAM — SUB WOOFER SECTION —



5-23. SCHEMATIC DIAGRAM — POWER AMP SECTION (1/2) —

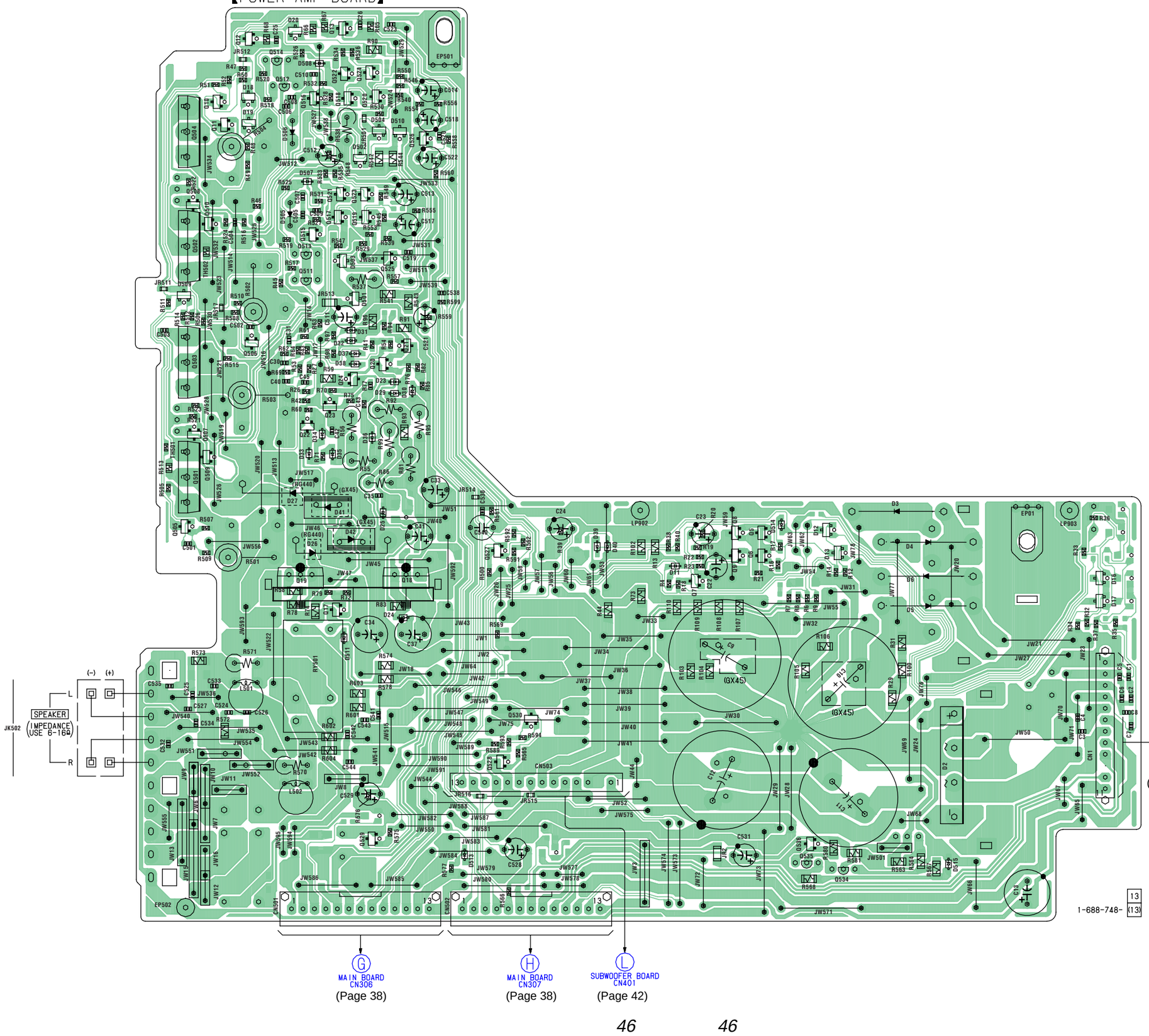


5-24. SCHEMATIC DIAGRAM — POWER AMP SECTION (2/2) —



5-25. PRINTED WIRING BOARD — POWER AMP SECTION — • Refer to page 29 for Circuit Boards Location. : Uses unleaded solder.

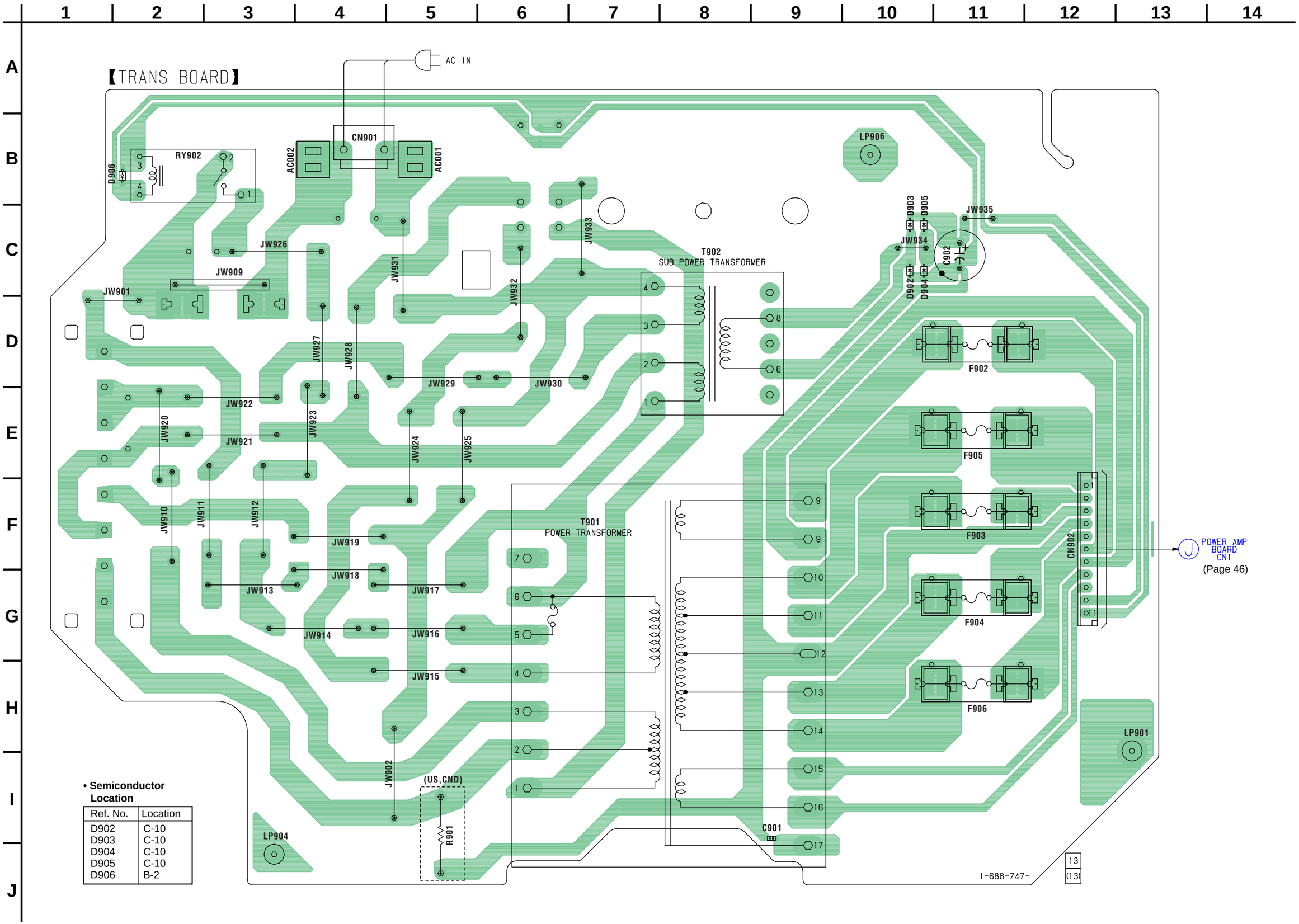
【POWER AMP BOARD】



• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D2	H-10	Q7	G-8
D3	F-10	Q8	F-8
D4	F-10	Q9	F-8
D5	G-10	Q10	B-3
D6	F-10	Q11	B-3
D11	F-7	Q12	A-3
D12	F-9	Q13	A-4
D13	F-9	Q17	G-4
D16	G-12	Q18	F-5
D17	G-12	Q19	F-4
D18	B-3	Q20	D-5
D19	B-3	Q21	D-5
D20	A-4	Q22	E-4
D23	E-5	Q23	E-4
D24	G-5	Q24	E-4
D25	F-5	Q501	E-3
D26	F-4	Q502	C-3
D27	F-4	Q503	D-3
D29	E-5	Q504	B-3
D30	E-5	Q505	F-3
D31	D-4	Q506	D-3
D32	D-4	Q507	E-3
D33	E-4	Q508	C-3
D34	E-4	Q509	E-3
D35	E-4	Q510	C-3
D36	E-4	Q511	D-4
D37	D-4	Q512	B-4
D38	D-4	Q513	C-4
D39	F-7	Q514	A-4
D40	F-7	Q515	C-4
D41	F-4	Q516	B-4
D42	F-4	Q517	C-4
D501	D-4	Q518	B-4
D502	B-4	Q519	C-4
D503	C-4	Q520	B-4
D504	B-5	Q521	C-4
D505	C-4	Q522	B-4
D506	B-4	Q523	C-4
D507	C-4	Q524	B-4
D508	A-4	Q525	C-5
D509	D-3	Q526	B-5
D510	B-5	Q527	F-6
D511	G-4	Q528	H-6
D513	I-5	Q529	I-4
D514	F-8	Q530	H-6
D515	I-10	Q534	I-9
		Q535	I-9
Q5	F-8	Q536	I-9
Q6	F-8		

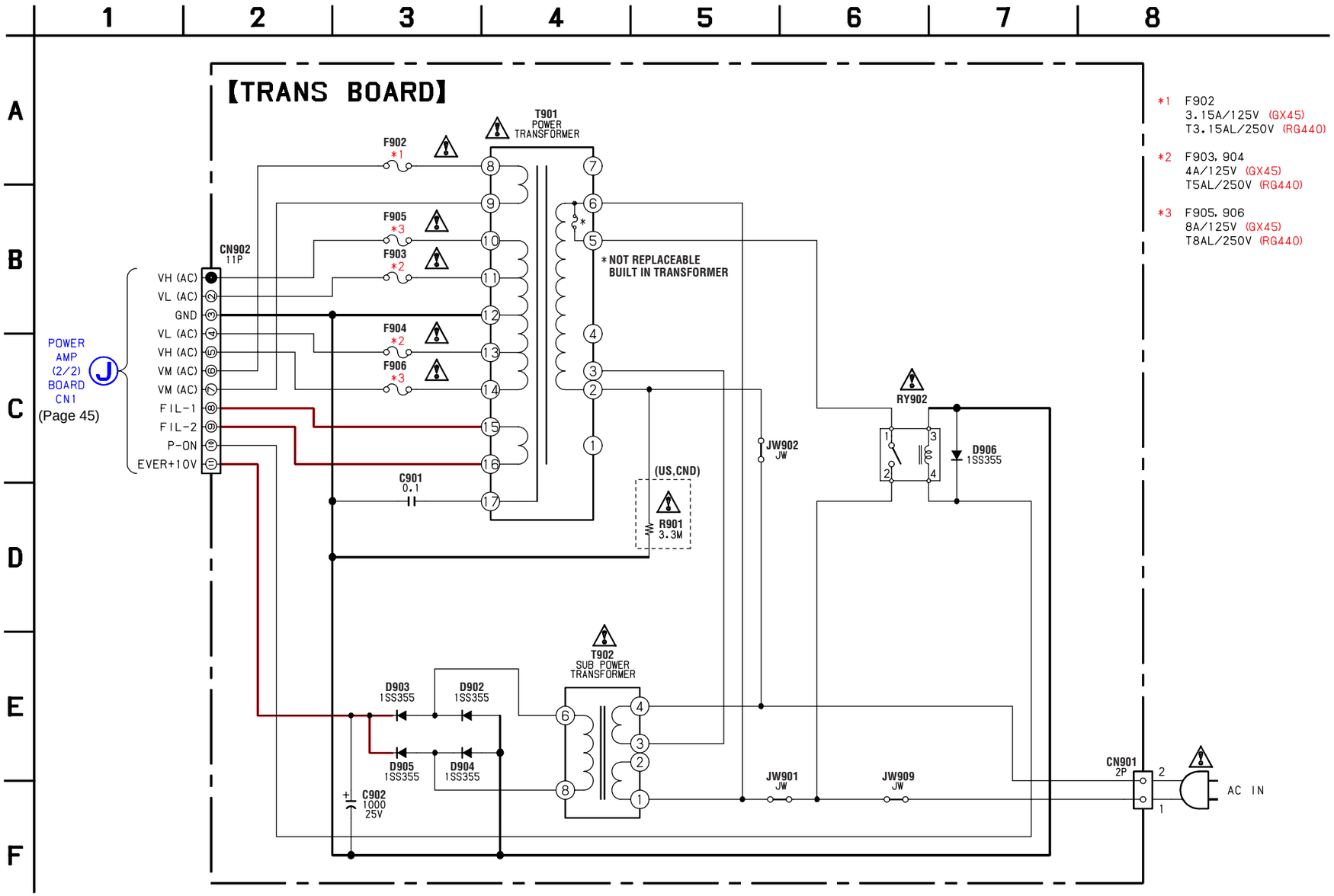
5-26. PRINTED WIRING BOARD — TRANSFORMER SECTION — • Refer to page 29 for Circuit Boards Location. : Uses unleaded solder.



• **Semiconductor Location**

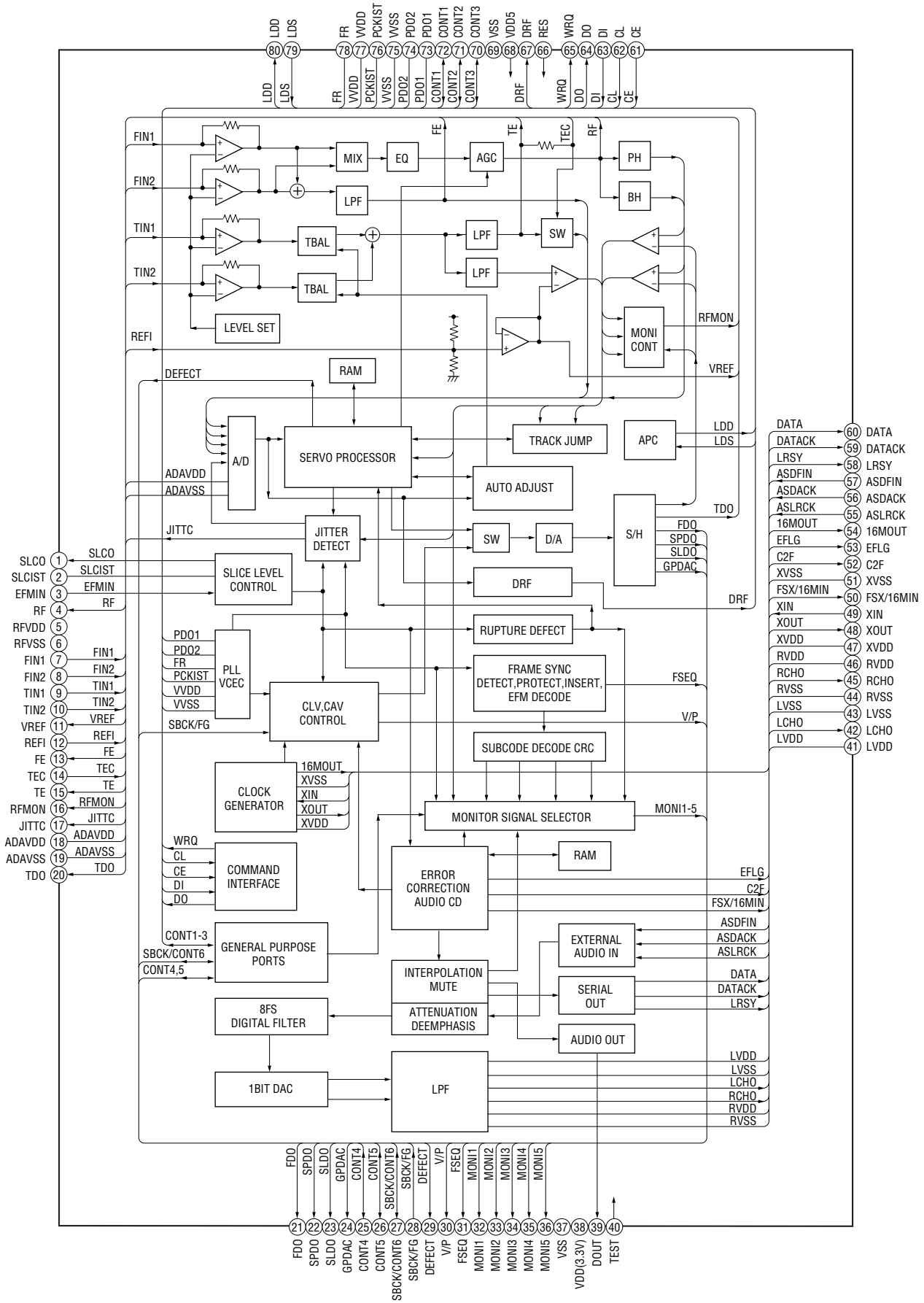
Ref. No.	Location
D902	C-10
D903	C-10
D904	C-10
D905	C-10
D906	B-2

5-27. SCHEMATIC DIAGRAM — TRANSFORMER SECTION —

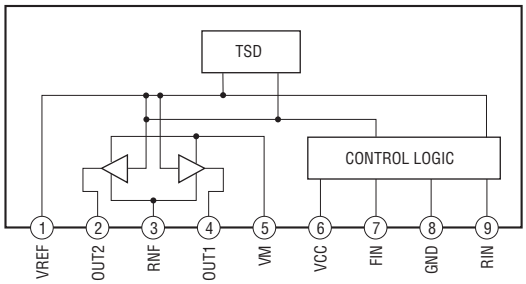


5-28. IC BLOCK DIAGRAMS

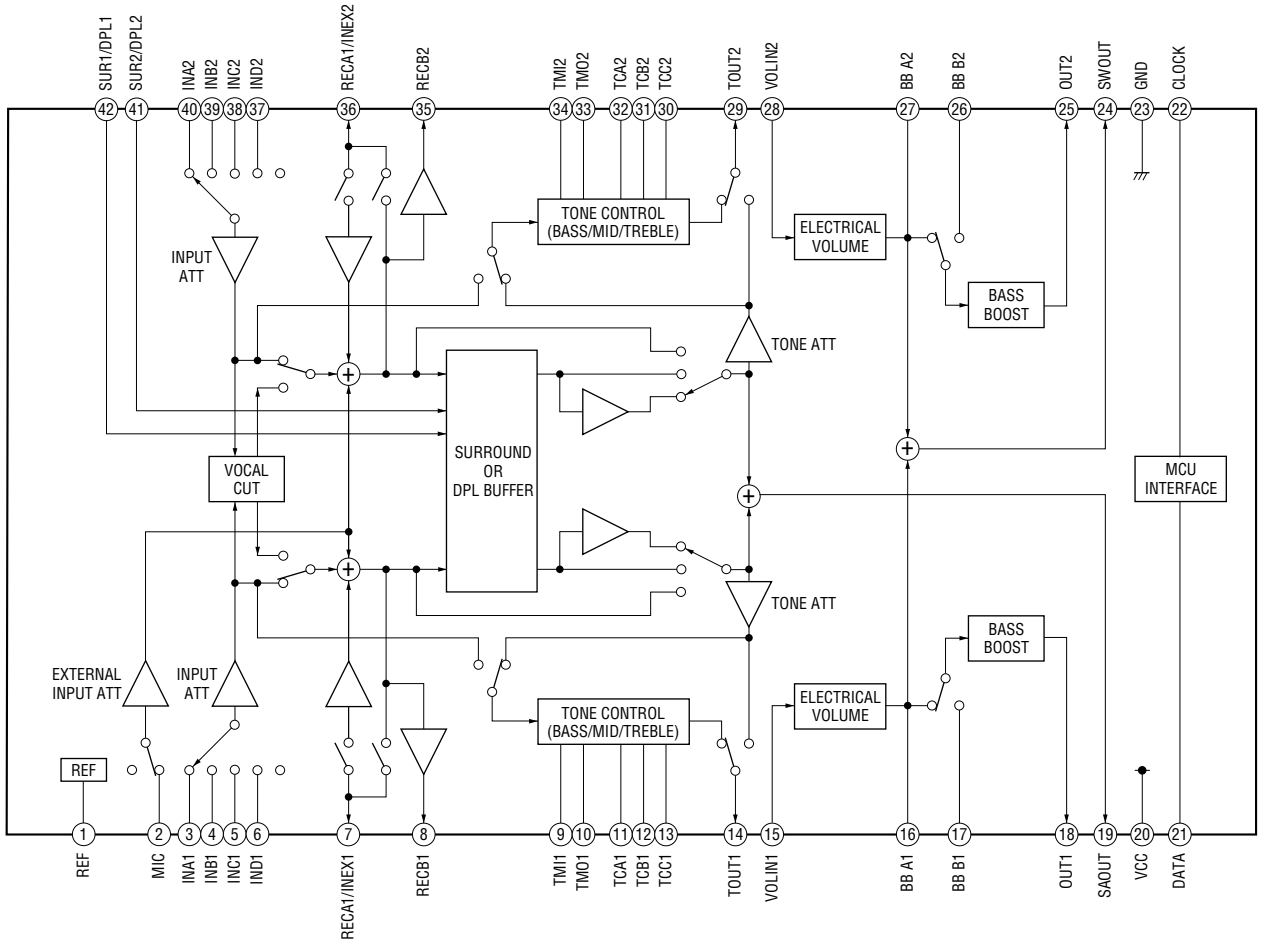
IC721 LC78646E-E (BD Board)



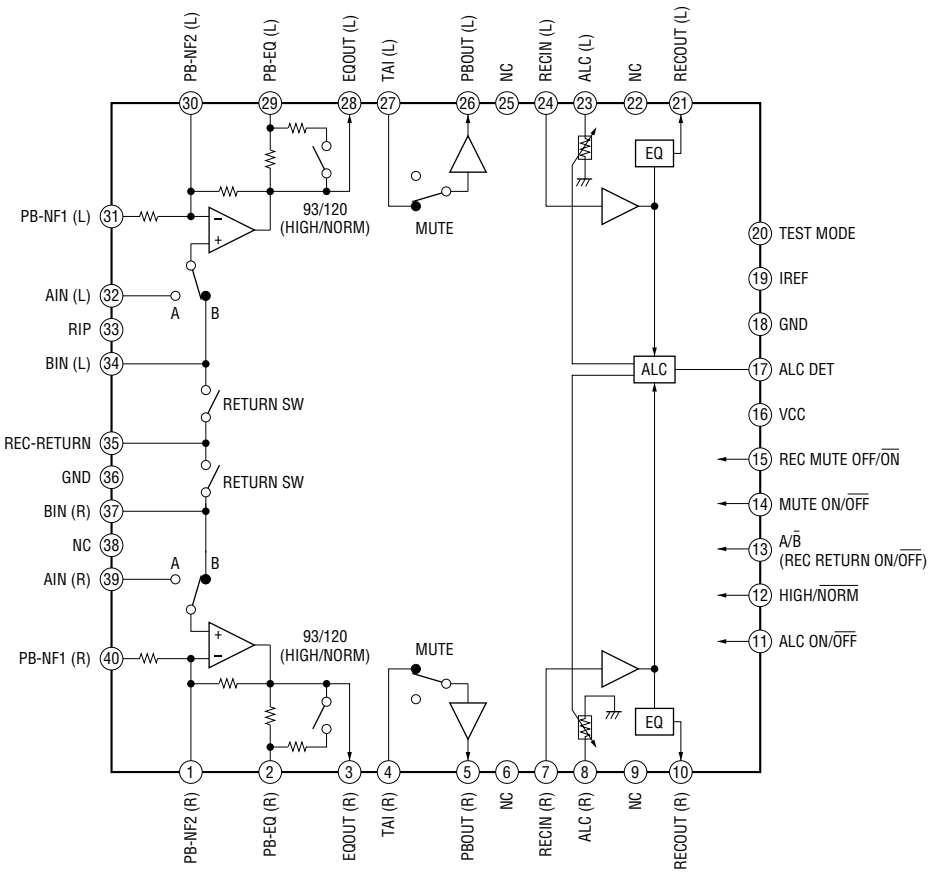
IC701, 712 BA6956AN (DRIVER Board)



IC301 M61529FP (MAIN Board)



IC201 HA12237F (MAIN Board)



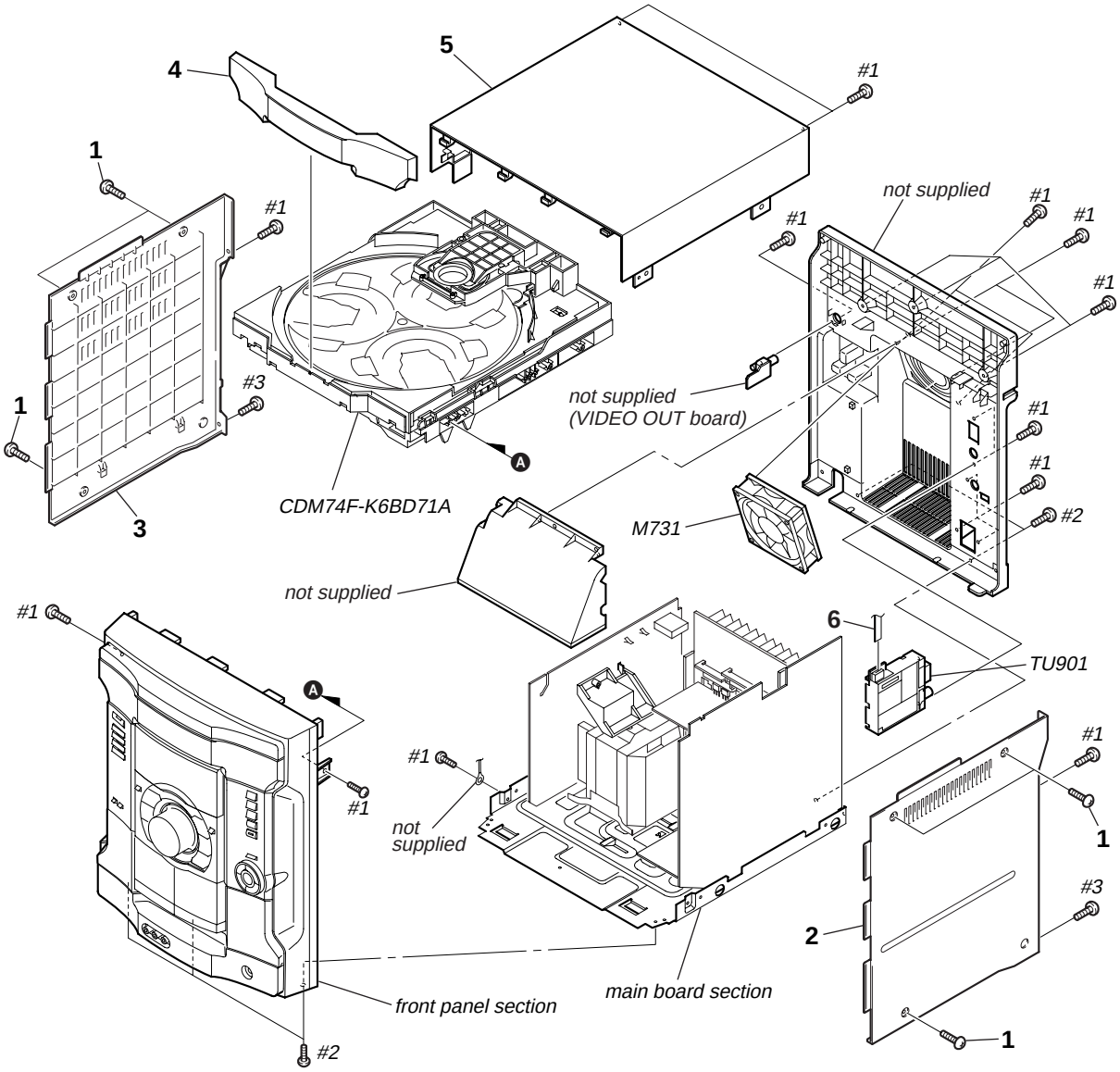
SECTION 6
EXPLODED VIEWS

NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Accessories are given in the last of this parts list.
- Abbreviation
  CND : Canadian model
  AUS : Australian model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

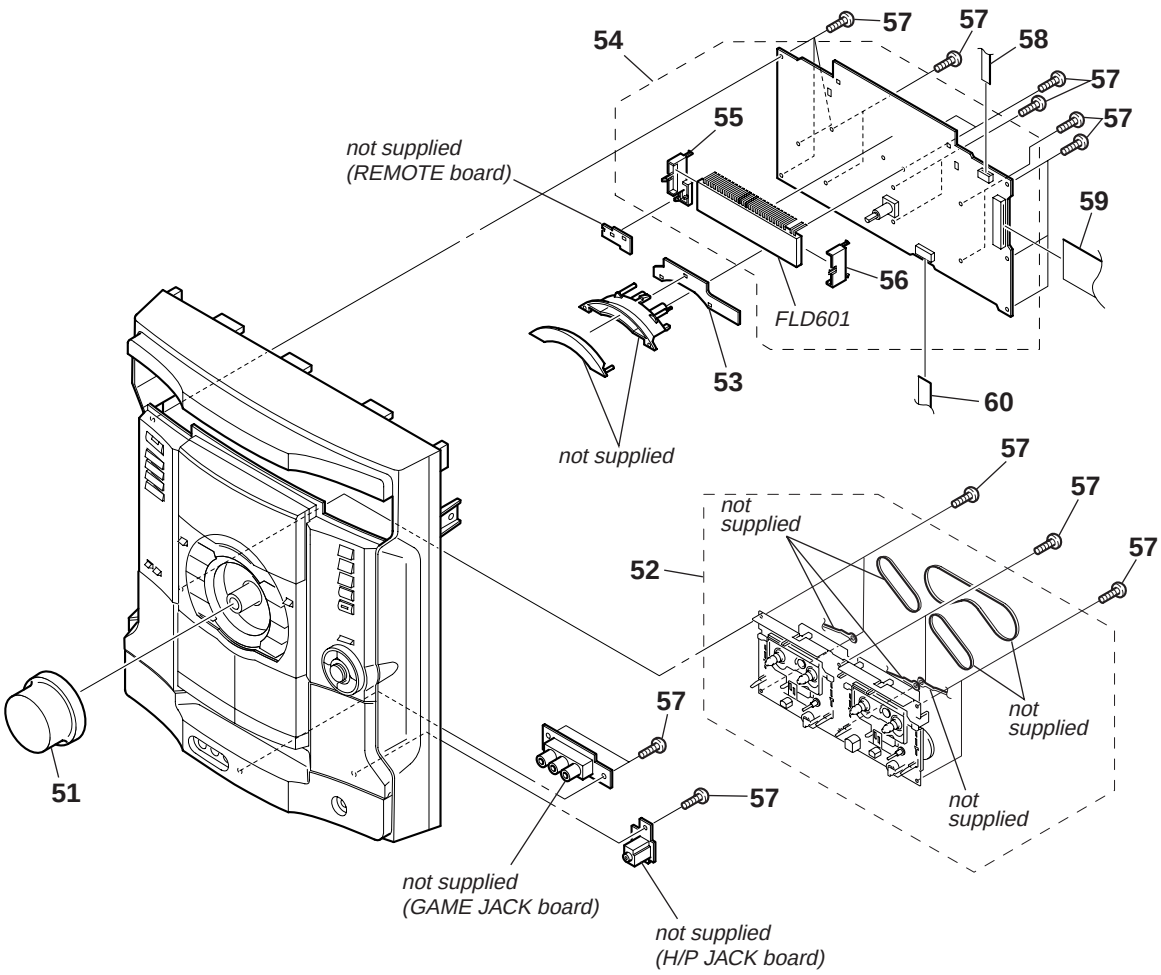
6-1. MAIN SECTION



Ref. No.	Part No.	Description	Remark
1	3-363-099-41	SCREW (CASE 3 TP2)	
2	4-245-184-21	CASE (SIDE-R) (GX45)	
2	4-245-184-31	CASE (SIDE-R) (RG440)	
3	4-245-183-21	CASE (SIDE-L) (GX45)	
3	4-245-183-31	CASE (SIDE-L) (RG440)	
4	4-244-662-51	CD DOOR (GX45)	
4	4-244-662-61	CD DOOR (RG440)	
5	4-244-849-01	CASE (TOP) (GX45)	
5	4-244-849-11	CASE (TOP) (RG440)	
6	1-769-939-11	WIRE (FLAT TYPE) (11 CORE) (GX45)	
6	1-773-003-11	WIRE (FLAT TYPE) (15 CORE) (RG440)	

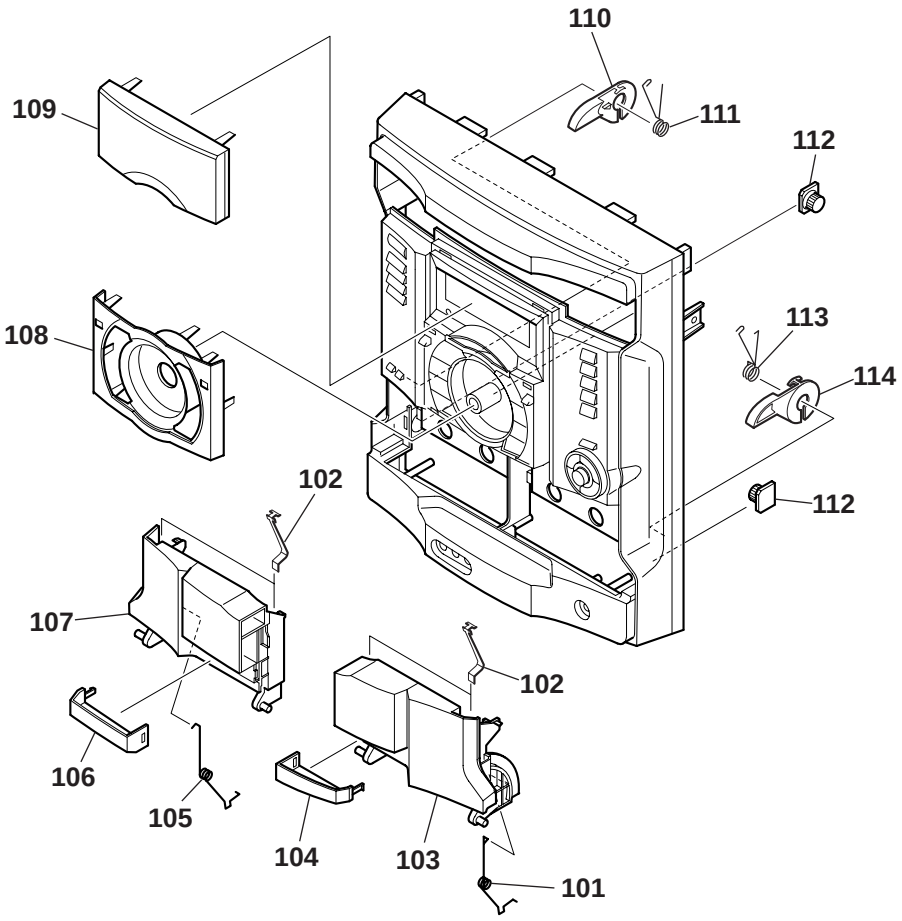
Ref. No.	Part No.	Description	Remark
M731	1-763-072-11	FAN, DC	
TU901	1-693-625-11	TUNER PACK (FM/AM) (ANTENNA) (GX45)	
TU901	1-693-626-11	TUNER PACK (FM/AM) (ANTENNA) (RG440:AEP,UK)	
TU901	1-693-628-11	TUNER PACK (FM/AM) (ANTENNA) (RG440:AUS)	
#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	
#2	7-685-872-09	SCREW +BVTT 3X8 (S)	
#3	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	

6-2. FRONT PANEL SECTION (1)



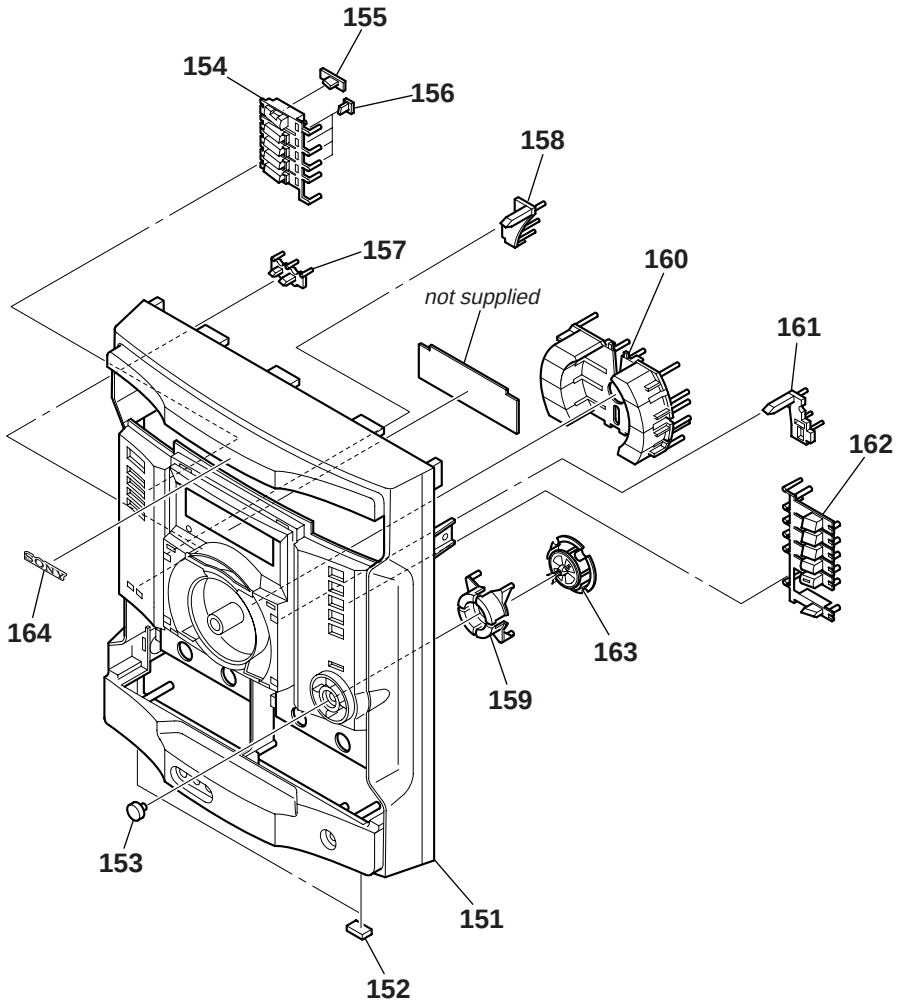
Ref. No.	Part No.	Description	Remark
51	4-244-686-01	VOLUME KNOB	
52	1-796-485-51	DECK, MECHANICAL	
53	1-688-081-21	6 STREAM LED BOARD	
54	A-4748-707-A	PANEL BOARD, COMPLETE (GX45)	
54	A-4748-713-A	PANEL BOARD, COMPLETE (RG440)	
55	4-244-690-01	FL HOLDER (L)	
56	4-244-691-01	FL HOLDER (R)	
57	4-951-620-01	SCREW (2.6X8), +BVTP	
58	1-769-914-11	WIRE (FLAT TYPE) (9 CORE)	
59	1-773-322-11	WIRE (FLAT TYPE) (31 CORE)	
60	1-827-145-11	WIRE (FLAT TYPE) (13 CORE)	
FLD601	1-518-863-11	INDICATOR TUBE, FLUORESCENT	

6-3. FRONT PANEL SECTION (2)



Ref. No.	Part No.	Description	Remark
101	4-244-701-01	CASS DOOR SPRING (B)	
102	4-238-631-01	TAPE SPRING	
103	4-244-666-01	CASS (DOOR) (R)	
104	4-244-668-01	CASS WINDOW (R)	
105	4-244-700-01	CASS DOOR SPRING (A)	
106	4-244-667-01	CASS WINDOW (L)	
107	4-244-663-01	CASS (DOOR) (L)	
108	4-244-661-01	SUB PANEL	
109	4-244-669-01	DISPLAY WINDOW	
110	4-231-824-01	CAM (A), HEART	
111	4-231-836-01	SPRING (HEART CAM-A)	
112	4-224-104-41	DAMPER	
113	4-231-841-01	SPRING (HEART CAM-B)	
114	4-231-825-01	CAM (B), HEART	

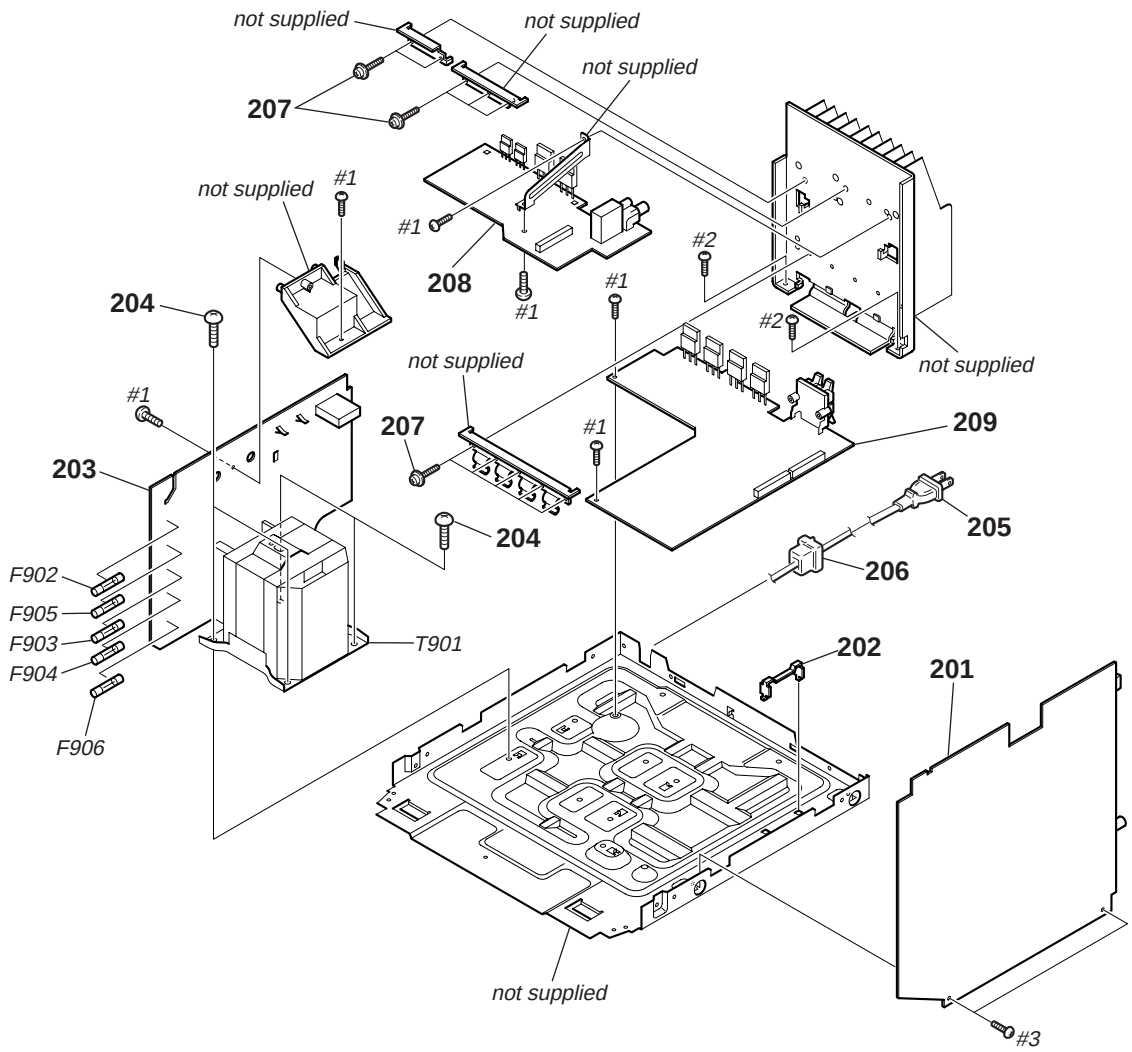
6-4. FRONT PANEL SECTION (3)



Ref. No.	Part No.	Description	Remark
151	4-244-660-11	FRONT PANEL (RG440)	
151	4-244-660-31	FRONT PANEL (GX45)	
152	4-225-252-01	CUSHION (FOOT)	
153	4-244-680-01	GAME MIXING BUTTON	
154	4-244-676-01	FUNCTION BUTTON	
155	4-244-677-01	POWER LENS	
156	4-244-678-01	FUNCTION LENS	
157	4-244-683-01	RECORD BUTTON (A)	

Ref. No.	Part No.	Description	Remark
158	4-246-086-01	DISPLAY BUTTON (A)	
159	4-244-684-01	EQ BUTTON	
160	4-244-906-01	CONTROL BUTTON (B)	
161	4-246-087-01	PAUSE BUTTON (A)	
162	4-244-679-01	DISC BUTTON	
163	4-244-687-01	GAME MIXING HOLDER	
164	3-038-018-01	EMBLEM, SONY	

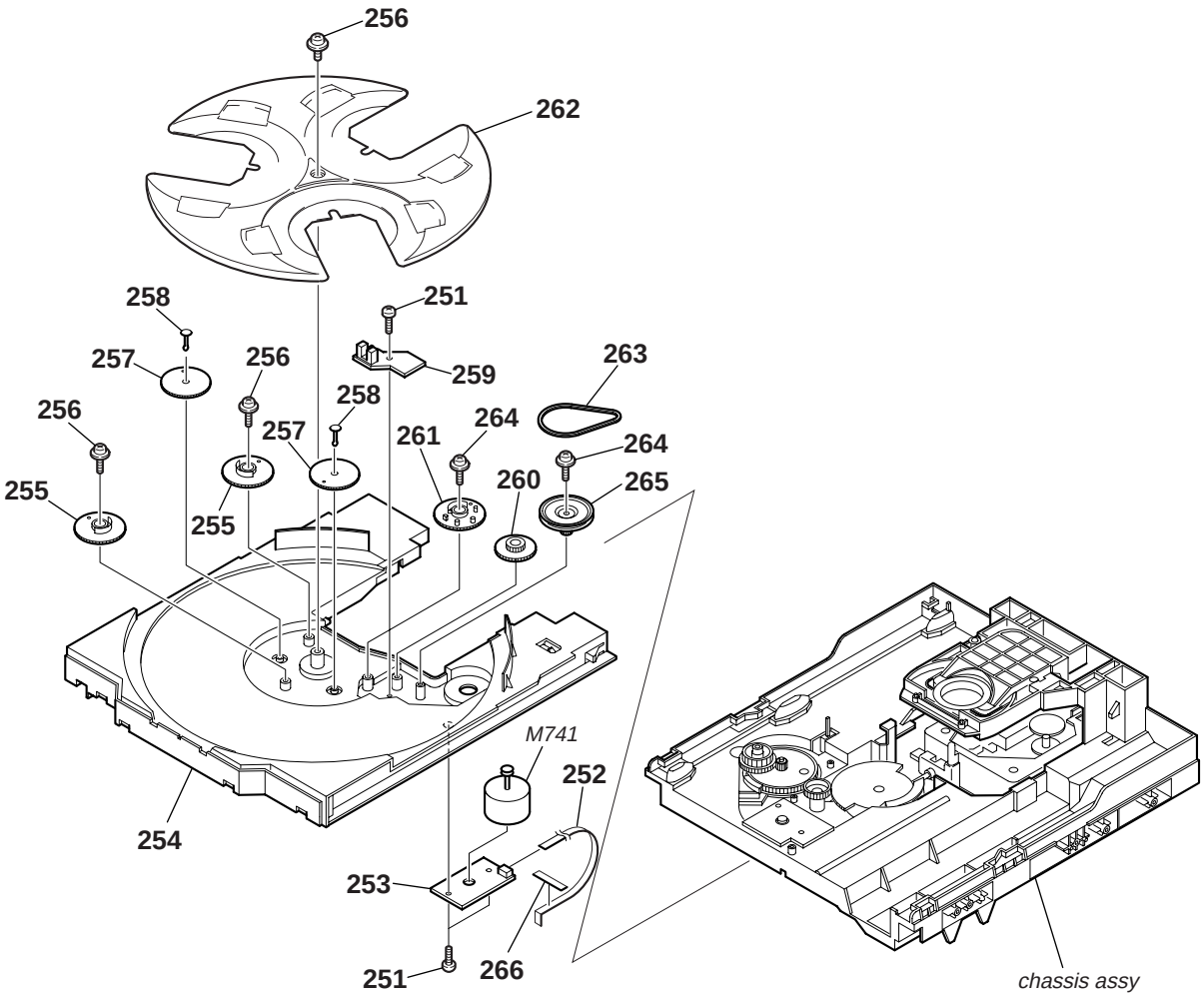
6-5. MAIN BOARD SECTION



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

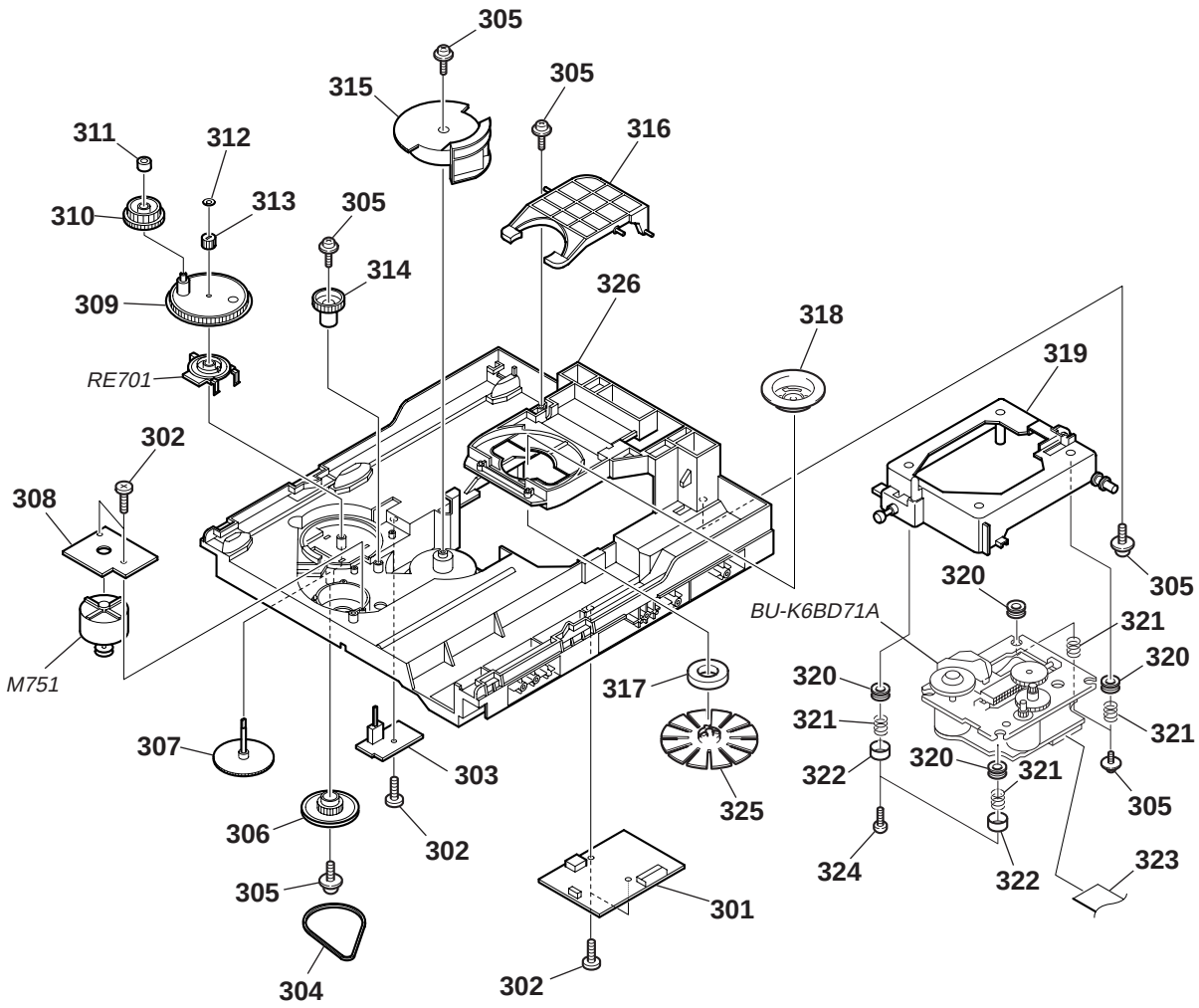
Ref. No.	Part No.	Description	Remark
201	A-4748-704-A	MAIN BOARD, COMPLETE	
202	4-988-533-01	HOLDER, PWB	
203	1-688-747-11	TRANS BOARD	
204	4-242-527-01	S-SCREW, ITC+4-8 R	
⚠205	1-690-608-11	CORD, POWER (RG440:AUS)	
⚠205	1-777-071-83	CORD, POWER (RG440:AEP,UK)	
⚠205	1-783-532-11	CORD, POWER (GX45)	
* 206	3-703-244-00	BUSHING (2104), CORD	
207	3-905-609-01	SCREW (TRANSISTOR)	
208	A-4732-797-A	SUBWOOFER BOARD, COMPLETE	
209	A-4748-696-A	POWER AMP BOARD, COMPLETE (GX45)	
209	A-4748-701-A	POWER AMP BOARD, COMPLETE (RG440)	
⚠F902	1-533-451-12	FUSE, GLASS TUBE (DIA.5) (3.15A/125V) (GX45)	
⚠F902	1-533-470-11	FUSE, GLASS TUBE (DIA.5) (T3.15AL/250V)	(RG440)
⚠F903	1-533-452-12	FUSE, GLASS TUBE (DIA.5) (4A/125V) (GX45)	
⚠F903	1-533-472-11	FUSE, GLASS TUBE (DIA.5) (T5AL/250V) (RG440)	
⚠F904	1-533-452-12	FUSE, GLASS TUBE (DIA.5) (4A/125V) (GX45)	
⚠F904	1-533-472-11	FUSE, GLASS TUBE (DIA.5) (T5AL/250V) (RG440)	
⚠F905	1-576-537-11	FUSE, GLASS TUBE (DIA.5) (8A/125V) (GX45)	
⚠F905	1-576-655-11	FUSE, GLASS TUBE (DIA.5) (T8AL/250V) (RG440)	
⚠F906	1-576-537-11	FUSE, GLASS TUBE (DIA.5) (8A/125V) (GX45)	
⚠F906	1-576-655-11	FUSE, GLASS TUBE (DIA.5) (T8AL/250V) (RG440)	
⚠T901	1-439-810-11	TRANSFORMER, POWER (GX45)	
⚠T901	1-439-811-11	TRANSFORMER, POWER (RG440:AEP,UK)	
⚠T901	1-443-025-11	TRANSFORMER, POWER (RG440:AUS)	
#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	
#2	7-685-872-09	SCREW +BVTP 3X8 (S)	
#3	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	

6-6. CD MECHANISM DECK SECTION (1)
(CDM74F-K6BD71A)



Ref. No.	Part No.	Description	Remark
251	4-218-253-21	SCREW (M2.6), +BTTP	
252	1-776-182-11	WIRE (FLAT TYPE) (5 CORE)	
253	1-687-134-11	MOTOR (TB) BOARD	
254	4-243-815-01	TABLE (LOADING)	
255	4-245-571-02	GEAR (STOPPER)	
256	4-218-252-61	SCREW (+PTPWH M2.6), FLOATING	
257	4-245-570-01	GEAR (JOINT)	
258	4-245-572-01	BUSHING (GEAR)	
259	1-687-132-11	SENSOR BOARD	
260	4-243-820-01	GEAR (TABLE)	
261	4-243-819-01	GEAR (GENEVA)	
262	4-243-816-01	TRAY	
263	4-243-823-01	BELT (TABLE)	
264	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
265	4-243-821-01	PULLEY (TABLE)	
266	3-231-598-01	SHEET (BA)	
M741	A-4723-963-A	MOTOR ASSY, TABLE (TABLE)	

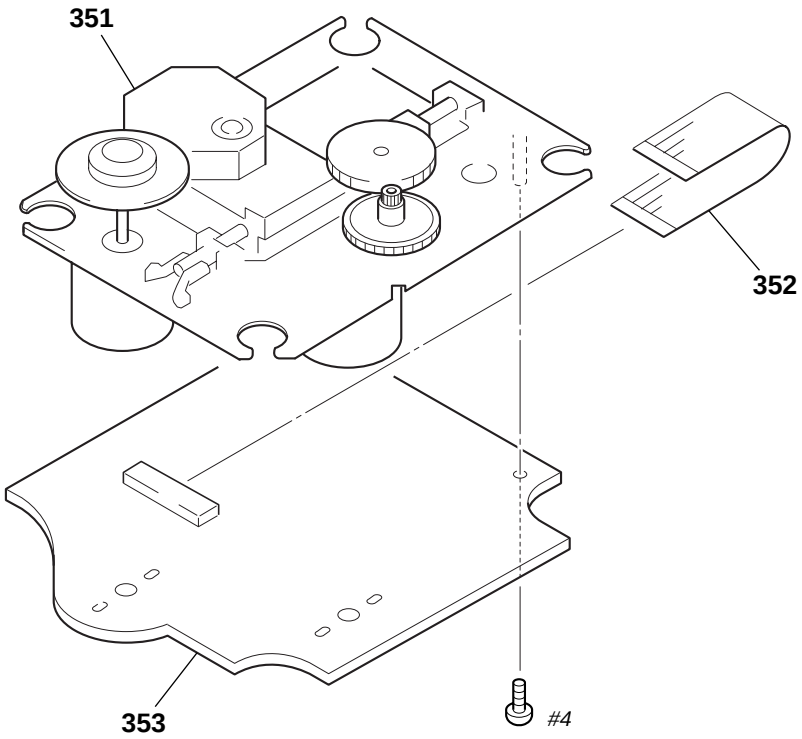
6-7. CD MECHANISM DECK SECTION (2)
(CDM74F-K6BD71A)



Ref. No.	Part No.	Description	Remark
301	1-687-135-11	DRIVER BOARD	
302	4-218-253-31	SCREW (M2.6), +BTTP	
303	1-687-669-11	SW BOARD	
304	4-244-034-01	BELT (LOADING)	
305	4-218-252-61	SCREW (+PTPWH M2.6), FLOATING	
306	4-225-844-01	GEAR (LOADING A)	
307	4-224-613-01	GEAR (SHAFT)	
308	1-687-133-11	MOTOR (LD) BOARD	
309	4-244-108-01	GEAR, SWING	
310	4-224-609-01	GEAR (LOADING C)	
311	4-224-608-01	COLLAR, SWING	
312	3-016-533-11	WASHER (FR), STOPPER	
313	4-224-611-01	GEAR (LOADING B)	
314	4-224-606-01	GEAR (RV)	
315	4-243-818-01	GEAR (U/D)	

Ref. No.	Part No.	Description	Remark
316	4-243-822-01	LEVER (LIFTER)	
317	1-471-035-11	MAGNET ASSY	
318	4-231-189-01	PULLEY (B), CHUCKING	
319	X-4955-536-1	HOLDER (213) ASSY	
320	4-227-549-11	INSULATOR	
321	4-227-045-31	SPRING (INSULATOR), COIL	
322	4-231-151-01	STOPPER (BU)	
323	1-827-146-11	WIRE (FLAT TYPE) (19 CORE)	
324	4-218-253-21	SCREW (M2.6), +BTTP	
325	X-4955-707-1	PULLEY (A5) ASSY, CHUCKING	
326	4-243-817-01	CHASSIS	
M751	A-4736-655-A	MOTOR ASSY, LOADING (LOADING)	
RE701	1-477-680-11	ENCODER, ROTARY (DISC TRAY ADDRESS DETECT)	

6-8. BASE UNIT SECTION (BU-K6BD71A)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
⚠351	A-4735-357-A	BASE ASSY, OP	
352	1-792-024-11	WIRE (FLAT TYPE) (16 CORE)	
353	A-4732-699-A	BD BOARD, COMPLETE	
#4	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	

BD

SECTION 7
ELECTRICAL PARTS LIST

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ, for example:
  uA.. : µA.. uPA.. : µPA..
  uPB.. : µPB.. uPC.. : µPC.. uPD.. : µPD..
- CAPACITORS
  uF : µF
- COILS
  uH : µH
- Abbreviation
  CND : Canadian model
  AUS : Australian model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
	A-4732-699-A	BD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C701	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C702	1-126-392-11	ELECT CHIP	100uF	20%	6.3V
C703	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C704	1-126-391-11	ELECT CHIP	47uF	20%	6.3V
C705	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C706	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C707	1-126-392-11	ELECT CHIP	100uF	20%	6.3V
C708	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C709	1-126-392-11	ELECT CHIP	100uF	20%	6.3V
C710	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C711	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C712	1-162-949-11	CERAMIC CHIP	47PF	5%	50V
C713	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C714	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C715	1-126-401-21	ELECT CHIP	1uF	20%	50V
C716	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C717	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C718	1-115-156-11	CERAMIC CHIP	1uF		10V
C719	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C720	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C721	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C722	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C723	1-126-392-11	ELECT CHIP	100uF	20%	6.3V
C729	1-128-360-11	ELECT CHIP	220uF	20%	10V
C731	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C732	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C733	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C734	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C735	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C741	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C742	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C743	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C744	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C746	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C747	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C748	1-128-360-11	ELECT CHIP	220uF	20%	10V
C753	1-162-949-11	CERAMIC CHIP	47PF	5%	50V
C754	1-162-949-11	CERAMIC CHIP	47PF	5%	50V
C756	1-162-949-11	CERAMIC CHIP	47PF	5%	50V
C802	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C803	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C804	1-162-945-11	CERAMIC CHIP	22PF	5%	50V
C805	1-126-392-11	ELECT CHIP	100uF	20%	6.3V
C806	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C807	1-126-392-11	ELECT CHIP	100uF	20%	6.3V
C810	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C811	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C812	1-115-156-11	CERAMIC CHIP	1uF		10V
C813	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C814	1-126-392-11	ELECT CHIP	100uF	20%	6.3V
C815	1-128-360-11	ELECT CHIP	220uF	20%	10V
C816	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C817	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C823	1-162-949-11	CERAMIC CHIP	47PF	5%	50V
C824	1-162-949-11	CERAMIC CHIP	47PF	5%	50V
C825	1-162-949-11	CERAMIC CHIP	47PF	5%	50V
C829	1-162-949-11	CERAMIC CHIP	47PF	5%	50V
C830	1-162-945-11	CERAMIC CHIP	22PF	5%	50V
C831	1-162-945-11	CERAMIC CHIP	22PF	5%	50V
C834	1-128-360-11	ELECT CHIP	220uF	20%	10V
C835	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C837	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C843	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C844	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C856	1-115-156-11	CERAMIC CHIP	1uF		10V
C857	1-162-945-11	CERAMIC CHIP	22PF	5%	50V
C858	1-162-945-11	CERAMIC CHIP	22PF	5%	50V
C859	1-162-945-11	CERAMIC CHIP	22PF	5%	50V
C860	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
		< CONNECTOR >			
CN708	1-817-244-11	CONNECTOR, FFC 16P			
CN710	1-778-874-11	CONNECTOR, FFC (LIF(NON-ZIF)) 19P			
		< FERRITE BEAD >			
FB701	1-550-907-21	BEAD, FERRITE (CHIP)			
FB707	1-550-907-21	BEAD, FERRITE (CHIP)			
FB708	1-550-907-21	BEAD, FERRITE (CHIP)			
FB801	1-550-907-21	BEAD, FERRITE (CHIP)			
FB802	1-550-907-21	BEAD, FERRITE (CHIP)			
FB803	1-550-907-21	BEAD, FERRITE (CHIP)			
FB804	1-550-907-21	BEAD, FERRITE (CHIP)			
FB805	1-550-907-21	BEAD, FERRITE (CHIP)			
FB806	1-550-907-21	BEAD, FERRITE (CHIP)			
FB807	1-550-907-21	BEAD, FERRITE (CHIP)			

Ref. No.	Part No.	Description			Remark
FB808	1-550-907-21	BEAD, FERRITE (CHIP)			
		< IC >			
IC721	6-701-796-01	IC LC78646E-E			
IC722	6-704-220-01	IC BA5836FP			
IC801	6-704-008-01	IC LC78684E-E			
IC802	6-704-009-01	IC LC32V4265CT-25-MPB-E			
IC803	6-704-007-01	IC MM1571J			
		< TRANSISTOR >			
Q701	8-729-054-57	TRANSISTOR KTN2907AS-RTK			
		< RESISTOR >			
R701	1-216-841-11	METAL CHIP	47K	5%	1/10W
R702	1-216-835-11	METAL CHIP	15K	5%	1/10W
R703	1-216-835-11	METAL CHIP	15K	5%	1/10W
R704	1-216-835-11	METAL CHIP	15K	5%	1/10W
R705	1-216-835-11	METAL CHIP	15K	5%	1/10W
R706	1-216-841-11	METAL CHIP	47K	5%	1/10W
R707	1-216-797-11	METAL CHIP	10	5%	1/10W
R708	1-216-833-11	METAL CHIP	10K	5%	1/10W
R709	1-216-838-11	METAL CHIP	27K	5%	1/10W
R711	1-216-815-11	METAL CHIP	330	5%	1/10W
R713	1-216-821-11	METAL CHIP	1K	5%	1/10W
R714	1-216-809-11	METAL CHIP	100	5%	1/10W
R715	1-216-809-11	METAL CHIP	100	5%	1/10W
R716	1-216-809-11	METAL CHIP	100	5%	1/10W
R717	1-216-809-11	METAL CHIP	100	5%	1/10W
R718	1-216-809-11	METAL CHIP	100	5%	1/10W
R719	1-216-809-11	METAL CHIP	100	5%	1/10W
R720	1-216-809-11	METAL CHIP	100	5%	1/10W
R721	1-216-809-11	METAL CHIP	100	5%	1/10W
R722	1-216-821-11	METAL CHIP	1K	5%	1/10W
R725	1-216-819-11	METAL CHIP	680	5%	1/10W
R726	1-216-819-11	METAL CHIP	680	5%	1/10W
R727	1-216-809-11	METAL CHIP	100	5%	1/10W
R728	1-216-841-11	METAL CHIP	47K	5%	1/10W
R729	1-216-834-11	METAL CHIP	12K	5%	1/10W
R730	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R731	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R732	1-216-864-11	METAL CHIP	0	5%	1/10W
R738	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R739	1-216-864-11	METAL CHIP	0	5%	1/10W
R740	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R741	1-216-864-11	METAL CHIP	0	5%	1/10W
R744	1-216-845-11	METAL CHIP	100K	5%	1/10W
R745	1-216-809-11	METAL CHIP	100	5%	1/10W
R746	1-216-803-11	METAL CHIP	33	5%	1/10W
R747	1-216-803-11	METAL CHIP	33	5%	1/10W
R760	1-216-809-11	METAL CHIP	100	5%	1/10W
R765	1-216-857-11	METAL CHIP	1M	5%	1/10W
R801	1-216-809-11	METAL CHIP	100	5%	1/10W
R802	1-216-809-11	METAL CHIP	100	5%	1/10W
R803	1-216-809-11	METAL CHIP	100	5%	1/10W
R804	1-216-809-11	METAL CHIP	100	5%	1/10W
R805	1-216-809-11	METAL CHIP	100	5%	1/10W
R806	1-216-809-11	METAL CHIP	100	5%	1/10W
R807	1-216-809-11	METAL CHIP	100	5%	1/10W

Ref. No.	Part No.	Description			Remark
R817	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R818	1-216-811-11	METAL CHIP	150	5%	1/10W
R819	1-216-821-11	METAL CHIP	1K	5%	1/10W
R820	1-216-821-11	METAL CHIP	1K	5%	1/10W
R823	1-216-809-11	METAL CHIP	100	5%	1/10W
R824	1-216-809-11	METAL CHIP	100	5%	1/10W
R825	1-216-809-11	METAL CHIP	100	5%	1/10W
R826	1-216-809-11	METAL CHIP	100	5%	1/10W
R827	1-216-809-11	METAL CHIP	100	5%	1/10W
R828	1-216-809-11	METAL CHIP	100	5%	1/10W
R829	1-216-809-11	METAL CHIP	100	5%	1/10W
R832	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R833	1-216-809-11	METAL CHIP	100	5%	1/10W
R834	1-216-809-11	METAL CHIP	100	5%	1/10W
R860	1-216-809-11	METAL CHIP	100	5%	1/10W
		< SWITCH >			
S701	1-771-853-11	SWITCH, DETECTION (LIMIT)			
		< VIBRATOR >			
X701	1-767-408-21	VIBRATOR, CRYSTAL (16.9344MHz)			
**********					
	1-687-135-11	DRIVER BOARD			
		**********			
		< CAPACITOR >			
C715	1-126-933-11	ELECT	100uF	20%	16V
C731	1-126-964-11	ELECT	10uF	20%	50V
C735	1-164-159-21	CERAMIC	0.1uF		50V
C736	1-164-159-21	CERAMIC	0.1uF		50V
C737	1-164-159-21	CERAMIC	0.1uF		50V
C741	1-162-306-11	CERAMIC	0.01uF	30%	16V
C751	1-162-306-11	CERAMIC	0.01uF	30%	16V
C752	1-164-159-21	CERAMIC	0.1uF		50V
		< CONNECTOR >			
CN701	1-785-338-11	PIN, CONNECTOR (LIGHT ANGLE) 12P			
CN702	1-784-766-11	CONNECTOR, FFC 5P			
* CN703	1-564-720-11	PIN, CONNECTOR (SMALL TYPE) 4P			
CN704	1-785-328-11	PIN, CONNECTOR (LIGHT ANGLE) 2P			
		< DIODE >			
D701	8-719-921-42	DIODE MTZJ-5.1A			
D711	8-719-109-69	DIODE RD3.6ES-B2			
		< IC >			
IC701	8-759-598-69	IC BA6956AN			
IC712	8-759-598-69	IC BA6956AN			
		< TRANSISTOR >			
Q731	8-729-029-66	TRANSISTOR DTC114ESA			
		< RESISTOR >			
R701	1-249-413-11	CARBON	470	5%	1/4W
R702	1-247-807-31	CARBON	100	5%	1/4W
R711	1-249-417-11	CARBON	1K	5%	1/4W
R712	1-249-425-11	CARBON	4.7K	5%	1/4W

DRIVER **GAME JACK** **H/P JACK** **MAIN**

Ref. No.	Part No.	Description			Remark
R713	1-249-433-11	CARBON	22K	5%	1/4W
R721	1-249-425-11	CARBON	4.7K	5%	1/4W
R722	1-249-425-11	CARBON	4.7K	5%	1/4W
R723	1-249-425-11	CARBON	4.7K	5%	1/4W
R731	1-247-807-31	CARBON	100	5%	1/4W
R732	1-249-429-11	CARBON	10K	5%	1/4W
R733	1-249-417-11	CARBON	1K	5%	1/4W
R734	1-249-430-11	CARBON	12K	5%	1/4W
R735	1-247-807-31	CARBON	100	5%	1/4W
R751	1-249-425-11	CARBON	4.7K	5%	1/4W
**********					
		GAME JACK BOARD			
		**********			
		< CAPACITOR >			
C001	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C002	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C003	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C004	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
		< JACK >			
JK001	1-815-684-11	JACK, PIN 3P (GAME INPUT VIDEO,AUDIO L/R)			
		< JUMPER RESISTOR >			
JR001	1-216-864-11	METAL CHIP	0	5%	1/10W
		< RESISTOR >			
R001	1-216-833-11	METAL CHIP	10K	5%	1/10W
R002	1-216-833-11	METAL CHIP	10K	5%	1/10W
R003	1-216-837-11	METAL CHIP	22K	5%	1/10W
R004	1-216-837-11	METAL CHIP	22K	5%	1/10W
**********					
		H/P JACK BOARD			
		**********			
		< CAPACITOR >			
C006	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C007	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C008	1-164-156-11	CERAMIC CHIP	0.1uF		25V
		< JACK >			
JK002	1-691-293-21	JACK (PHONES)			
**********					
	A-4748-704-A	MAIN BOARD, COMPLETE			
		**********			
	7-685-872-09	SCREW +BVTT 3X8 (S)			
		< CAPACITOR >			
C101	1-126-963-11	ELECT	4.7uF	20%	50V
C102	1-126-963-11	ELECT	4.7uF	20%	50V
C103	1-126-933-11	ELECT	100uF	20%	16V
C105	1-162-962-11	CERAMIC CHIP	470PF	10%	50V (RG440:AEP,UK)
C106	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C107	1-164-156-11	CERAMIC CHIP	0.1uF		25V

Ref. No.	Part No.	Description			Remark
C201	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C202	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C203	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C204	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C205	1-162-960-11	CERAMIC CHIP	220PF	10%	50V (RG440:AEP,UK)
C206	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C221	1-126-947-11	ELECT	47uF	20%	16V
C223	1-137-350-11	MYLAR	0.015uF	5%	100V
C225	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C226	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C227	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C228	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C230	1-162-949-11	CERAMIC CHIP	47PF	5%	50V
C231	1-162-949-11	CERAMIC CHIP	47PF	5%	50V
C232	1-126-947-11	ELECT	47uF	20%	16V
C233	1-130-485-00	MYLAR	0.015uF	5%	50V
C234	1-130-485-00	MYLAR	0.015uF	5%	50V
C235	1-126-960-11	ELECT	1uF	20%	50V
C236	1-126-933-11	ELECT	100uF	20%	16V
C237	1-126-960-11	ELECT	1uF	20%	50V
C239	1-130-485-00	MYLAR	0.015uF	5%	50V
C240	1-126-964-11	ELECT	10uF	20%	50V
C241	1-130-479-00	MYLAR	0.0047uF	5%	50V
C242	1-130-485-00	MYLAR	0.015uF	5%	50V
C244	1-126-947-11	ELECT	47uF	20%	16V
C247	1-126-961-11	ELECT	2.2uF	20%	50V
C248	1-126-961-11	ELECT	2.2uF	20%	50V
C249	1-126-961-11	ELECT	2.2uF	20%	50V
C250	1-126-961-11	ELECT	2.2uF	20%	50V
C253	1-126-933-11	ELECT	100uF	20%	16V
C254	1-126-963-11	ELECT	4.7uF	20%	50V
C255	1-126-961-11	ELECT	2.2uF	20%	50V
C256	1-126-959-11	ELECT	0.47uF	20%	50V
C257	1-126-956-11	ELECT	0.1uF	20%	50V
C258	1-126-963-11	ELECT	4.7uF	20%	50V
C259	1-128-551-11	ELECT	22uF	20%	25V
C260	1-126-959-11	ELECT	0.47uF	20%	50V
C261	1-126-959-11	ELECT	0.47uF	20%	50V
C265	1-130-489-00	MYLAR	0.033uF	5%	50V
C266	1-130-483-00	MYLAR	0.01uF	5%	50V
C267	1-130-483-00	MYLAR	0.01uF	5%	50V
C268	1-126-960-11	ELECT	1uF	20%	50V
C269	1-126-960-11	ELECT	1uF	20%	50V
C272	1-126-960-11	ELECT	1uF	20%	50V
C273	1-126-960-11	ELECT	1uF	20%	50V
C285	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C286	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C300	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C303	1-104-665-11	ELECT	100uF	20%	10V
C304	1-126-963-11	ELECT	4.7uF	20%	50V
C305	1-162-919-11	CERAMIC CHIP	22PF	5%	50V (RG440:AEP,UK)
C306	1-162-919-11	CERAMIC CHIP	22PF	5%	50V (RG440:AEP,UK)
C307	1-126-964-11	ELECT	10uF	20%	50V
C308	1-126-964-11	ELECT	10uF	20%	50V
C309	1-126-964-11	ELECT	10uF	20%	50V

Ref. No.	Part No.	Description			Remark
C310	1-126-964-11	ELECT	10uF	20%	50V
C311	1-126-964-11	ELECT	10uF	20%	50V
C312	1-126-964-11	ELECT	10uF	20%	50V
C313	1-107-714-11	ELECT	10uF	20%	16V
C314	1-107-714-11	ELECT	10uF	20%	16V
C317	1-126-964-11	ELECT	10uF	20%	50V
C318	1-126-964-11	ELECT	10uF	20%	50V
C319	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C320	1-130-487-00	MYLAR	0.022uF	5%	50V
C321	1-130-487-00	MYLAR	0.022uF	5%	50V
C323	1-130-487-00	MYLAR	0.022uF	5%	50V
C324	1-130-487-00	MYLAR	0.022uF	5%	50V
C325	1-130-491-00	MYLAR	0.047uF	5%	50V
C326	1-130-491-00	MYLAR	0.047uF	5%	50V
C327	1-130-476-00	MYLAR	0.0027uF	5%	50V
C328	1-130-476-00	MYLAR	0.0027uF	5%	50V
C331	1-130-494-11	MYLAR	0.082uF	5%	50V
C332	1-130-494-11	MYLAR	0.082uF	5%	50V
C333	1-130-493-00	MYLAR	0.068uF	5%	50V
C334	1-130-493-00	MYLAR	0.068uF	5%	50V
C335	1-136-169-00	FILM	0.22uF	5%	50V
C336	1-136-171-00	FILM	0.33uF	5%	50V
C337	1-126-964-11	ELECT	10uF	20%	50V
C338	1-130-491-00	MYLAR	0.047uF	5%	50V
C339	1-126-934-11	ELECT	220uF	20%	16V
C342	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C344	1-126-933-11	ELECT	100uF	20%	16V
C345	1-126-933-11	ELECT	100uF	20%	16V
C346	1-126-964-11	ELECT	10uF	20%	50V
C348	1-126-947-11	ELECT	47uF	20%	16V
C349	1-126-964-11	ELECT	10uF	20%	50V
C350	1-126-964-11	ELECT	10uF	20%	50V
C353	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C354	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C355	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C356	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C357	1-126-926-11	ELECT	1000uF	20%	10V
C359	1-126-947-11	ELECT	47uF	20%	16V
C361	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C362	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C363	1-126-964-11	ELECT	10uF	20%	50V
C364	1-126-964-11	ELECT	10uF	20%	50V
C365	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C366	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C368	1-136-169-00	FILM	0.22uF	5%	50V
C369	1-126-964-11	ELECT	10uF	20%	50V
C370	1-126-964-11	ELECT	10uF	20%	50V
C371	1-126-947-11	ELECT	47uF	20%	16V
C372	1-126-964-11	ELECT	10uF	20%	50V
C373	1-130-483-00	MYLAR	0.01uF	5%	50V
C374	1-130-483-00	MYLAR	0.01uF	5%	50V
C375	1-126-943-11	ELECT	2200uF	20%	25V
C376	1-126-947-11	ELECT	47uF	20%	16V
C377	1-126-963-11	ELECT	4.7uF	20%	50V
C378	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C380	1-126-935-11	ELECT	470uF	20%	16V
C381	1-126-947-11	ELECT	47uF	20%	16V
C386	1-126-947-11	ELECT	47uF	20%	16V
C389	1-126-933-11	ELECT	100uF	20%	16V
C390	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C391	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C392	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C393	1-126-959-11	ELECT	0.47uF	20%	50V
C394	1-126-964-11	ELECT	10uF	20%	50V
C397	1-104-665-11	ELECT	100uF	20%	10V
C398	1-126-964-11	ELECT	10uF	20%	50V
C399	1-126-935-11	ELECT	470uF	20%	16V
C401	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C402	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C409	1-126-964-11	ELECT	10uF	20%	50V
C411	1-107-713-11	ELECT	4.7uF	20%	35V
C412	1-107-713-11	ELECT	4.7uF	20%	35V
C417	1-126-926-11	ELECT	1000uF	20%	10V
C418	1-130-483-00	MYLAR	0.01uF	5%	50V
C419	1-130-483-00	MYLAR	0.01uF	5%	50V
C420	1-126-943-11	ELECT	2200uF	20%	25V
C421	1-126-934-11	ELECT	220uF	20%	16V
C423	1-126-947-11	ELECT	47uF	20%	16V
C424	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
					(RG440:AEP,UK)
C425	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
					(RG440:AEP,UK)
C426	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
					(RG440:AEP,UK)
C427	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
					(RG440:AEP,UK)
C428	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
					(RG440:AEP,UK)
C429	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
					(RG440:AEP,UK)
C430	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
					(RG440:AEP,UK)
C431	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
					(RG440:AEP,UK)
C432	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
					(RG440:AEP,UK)
C433	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
					(RG440:AEP,UK)
C434	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
					(RG440:AEP,UK)
C435	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
					(RG440:AEP,UK)
C436	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
					(RG440:AEP,UK)
C437	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
					(RG440:AEP,UK)
C438	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
					(RG440:AEP,UK)
C441	1-165-128-11	CERAMIC CHIP	0.22uF		16V
					(RG440:AEP,UK)
C444	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
					(RG440:AEP,UK)
C445	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
					(RG440:AEP,UK)
C448	1-164-156-11	CERAMIC CHIP	0.1uF		25V
					(RG440:AEP,UK)
C449	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
					(RG440:AEP,UK)
C450	1-126-964-11	ELECT	10uF	20%	50V

MAIN

Ref. No.	Part No.	Description	Remark
C451	1-162-960-11	CERAMIC CHIP 220PF 10% 50V	(RG440:AEP,UK)
C452	1-162-960-11	CERAMIC CHIP 220PF 10% 50V	(RG440:AEP,UK)
C453	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	(RG440:AEP,UK)
		< CONNECTOR >	
CN101	1-568-830-11	CONNECTOR, FFC 11P (GX45/RG440:AUS)	
CN101	1-784-776-11	CONNECTOR, FFC 15P (RG440:AEP,UK)	
* CN102	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P	(RG440:AEP,UK)
* CN202	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P	
* CN203	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
* CN303	1-564-506-11	PLUG, CONNECTOR 3P	
CN304	1-784-792-11	CONNECTOR, FFC 31P	
* CN305	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
CN306	1-778-982-21	CONNECTOR, BOARD TO BOARD 13P	
CN307	1-778-982-21	CONNECTOR, BOARD TO BOARD 13P	
CN310	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P	
CN311	1-568-828-11	CONNECTOR, FFC 9P	
CN312	1-784-780-11	CONNECTOR, FFC 19P	
		< DIODE >	
D101	8-719-988-61	DIODE 1SS355TE-17 (RG440:AEP,UK)	
D102	6-500-522-21	DIODE 10EDB40-TB3	
D203	8-719-988-61	DIODE 1SS355TE-17	
D204	8-719-988-61	DIODE 1SS355TE-17	
D205	8-719-988-61	DIODE 1SS355TE-17	
D206	8-719-988-61	DIODE 1SS355TE-17	
D210	8-719-988-61	DIODE 1SS355TE-17	
D301	6-500-522-21	DIODE 10EDB40-TB3	
D302	6-500-522-21	DIODE 10EDB40-TB3	
D303	6-500-522-21	DIODE 10EDB40-TB3	
D304	6-500-522-21	DIODE 10EDB40-TB3	
D305	8-719-988-61	DIODE 1SS355TE-17	
D306	8-719-988-61	DIODE 1SS355TE-17	
D307	8-719-988-61	DIODE 1SS355TE-17	
D308	8-719-988-61	DIODE 1SS355TE-17	
D311	8-719-988-61	DIODE 1SS355TE-17	
D312	8-719-083-63	DIODE UDZS-TE17-13B	
D313	6-500-522-21	DIODE 10EDB40-TB3	
D314	6-500-522-21	DIODE 10EDB40-TB3	
D315	6-500-522-21	DIODE 10EDB40-TB3	
D316	6-500-522-21	DIODE 10EDB40-TB3	
D317	8-719-988-61	DIODE 1SS355TE-17	
D318	8-719-085-36	DIODE 11EQS04-TB5	
D319	6-500-522-21	DIODE 10EDB40-TB3	
D320	6-500-522-21	DIODE 10EDB40-TB3	
D321	6-500-522-21	DIODE 10EDB40-TB3	
D322	6-500-522-21	DIODE 10EDB40-TB3	
D323	8-719-085-36	DIODE 11EQS04-TB5	
D324	8-719-988-61	DIODE 1SS355TE-17	
D325	8-719-988-61	DIODE 1SS355TE-17	
D364	8-719-988-61	DIODE 1SS355TE-17	
D366	8-719-988-61	DIODE 1SS355TE-17	
D371	8-719-988-61	DIODE 1SS355TE-17	
D374	8-719-988-61	DIODE 1SS355TE-17	

Ref. No.	Part No.	Description	Remark
		< EARTH TERMINAL >	
* G1	1-537-738-21	TERMINAL, EARTH	
* G2	1-537-738-21	TERMINAL, EARTH (RG440:AEP,UK)	
		< IC >	
IC201	6-702-130-01	IC HA12237F	
IC301	6-703-650-11	IC M61529FP-D60G	
IC302	8-759-710-97	IC NJM4565M-D	
IC304	8-759-710-97	IC NJM4565M-D	
IC305	8-759-701-59	IC NJM78M09FA	
IC306	6-701-760-01	IC uPC3504AHF	
IC308	8-759-701-59	IC NJM78M09FA	
IC309	6-704-046-01	IC BU2099FV	
IC310	6-704-046-01	IC BU2099FV	
IC312	8-759-710-97	IC NJM4565M-D	
IC313	8-759-231-57	IC TA7810S	
		< JUMPER RESISTOR >	
JR124	1-216-864-11	METAL CHIP 0 5% 1/10W	(RG440:AEP,UK)
JR300	1-216-864-11	METAL CHIP 0 5% 1/10W	
JR329	1-216-864-11	METAL CHIP 0 5% 1/10W	
JR330	1-216-864-11	METAL CHIP 0 5% 1/10W	
JR331	1-216-864-11	METAL CHIP 0 5% 1/10W	
JR332	1-216-864-11	METAL CHIP 0 5% 1/10W	
JR333	1-216-864-11	METAL CHIP 0 5% 1/10W	
JR339	1-216-864-11	METAL CHIP 0 5% 1/10W	
JR341	1-216-864-11	METAL CHIP 0 5% 1/10W	
JR343	1-216-864-11	METAL CHIP 0 5% 1/10W	
JR344	1-216-864-11	METAL CHIP 0 5% 1/10W	
JR358	1-216-864-11	METAL CHIP 0 5% 1/10W	(GX45/RG440:AUS)
JR453	1-216-864-11	METAL CHIP 0 5% 1/10W	(RG440:AEP,UK)
		< COIL >	
L201	1-424-849-11	COIL, OSCILLATION (BIAS)	
		< TRANSISTOR >	
Q210	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q211	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q212	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q218	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q219	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q220	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q221	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q222	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q223	8-729-142-46	TRANSISTOR 2SC2001-LK	
Q225	6-550-289-01	TRANSISTOR 2SA1235F	
Q228	8-729-140-04	TRANSISTOR 2SB1116A-L	
Q301	6-550-296-01	TRANSISTOR 2SA1980G	
Q302	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q304	6-550-296-01	TRANSISTOR 2SA1980G	
Q309	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q310	8-729-052-79	TRANSISTOR 2SD1306NETL	
Q311	8-729-052-79	TRANSISTOR 2SD1306NETL	
Q312	6-550-289-01	TRANSISTOR 2SA1235F	

Ref. No.	Part No.	Description			Remark
Q321	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q322	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q324	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q326	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q329	6-550-289-01	TRANSISTOR	2SA1235F		
Q330	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q331	6-550-289-01	TRANSISTOR	2SA1235F		
Q371	8-729-142-46	TRANSISTOR	2SC2001-LK		
Q373	8-729-142-46	TRANSISTOR	2SC2001-LK		
		< RESISTOR >			
R101	1-216-833-11	METAL CHIP	10K	5%	1/10W
R102	1-216-833-11	METAL CHIP	10K	5%	1/10W
R215	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R216	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R218	1-216-849-11	METAL CHIP	220K	5%	1/10W
R219	1-216-833-11	METAL CHIP	10K	5%	1/10W
R220	1-216-833-11	METAL CHIP	10K	5%	1/10W
R225	1-216-834-11	METAL CHIP	12K	5%	1/10W
R226	1-216-834-11	METAL CHIP	12K	5%	1/10W
R231	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R232	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R233	1-216-837-11	METAL CHIP	22K	5%	1/10W
R234	1-216-837-11	METAL CHIP	22K	5%	1/10W
R235	1-216-833-11	METAL CHIP	10K	5%	1/10W
R236	1-216-821-11	METAL CHIP	1K	5%	1/10W
R237	1-216-857-11	METAL CHIP	1M	5%	1/10W
R238	1-216-853-11	METAL CHIP	470K	5%	1/10W
R239	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R241	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R242	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R245	1-216-833-11	METAL CHIP	10K	5%	1/10W
R246	1-216-841-11	METAL CHIP	47K	5%	1/10W
R249	1-216-853-11	METAL CHIP	470K	5%	1/10W
R250	1-216-849-11	METAL CHIP	220K	5%	1/10W
R251	1-216-793-11	METAL CHIP	4.7	5%	1/10W
R252	1-216-838-11	METAL CHIP	27K	5%	1/10W
R253	1-216-833-11	METAL CHIP	10K	5%	1/10W
R256	1-216-833-11	METAL CHIP	10K	5%	1/10W
R257	1-216-817-11	METAL CHIP	470	5%	1/10W
R258	1-216-809-11	METAL CHIP	100	5%	1/10W
R260	1-216-809-11	METAL CHIP	100	5%	1/10W
R261	1-216-817-11	METAL CHIP	470	5%	1/10W
R262	1-216-845-11	METAL CHIP	100K	5%	1/10W
R263	1-216-833-11	METAL CHIP	10K	5%	1/10W
R264	1-216-833-11	METAL CHIP	10K	5%	1/10W
R265	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R266	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R267	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R268	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R269	1-216-833-11	METAL CHIP	10K	5%	1/10W
R270	1-216-833-11	METAL CHIP	10K	5%	1/10W
R271	1-216-833-11	METAL CHIP	10K	5%	1/10W
R272	1-216-833-11	METAL CHIP	10K	5%	1/10W
R273	1-216-833-11	METAL CHIP	10K	5%	1/10W
R278	1-216-837-11	METAL CHIP	22K	5%	1/10W
R282	1-216-809-11	METAL CHIP	100	5%	1/10W
R283	1-216-833-11	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R284	1-216-833-11	METAL CHIP	10K	5%	1/10W
R285	1-216-833-11	METAL CHIP	10K	5%	1/10W
R286	1-216-833-11	METAL CHIP	10K	5%	1/10W
R287	1-216-833-11	METAL CHIP	10K	5%	1/10W
R288	1-216-833-11	METAL CHIP	10K	5%	1/10W
R305	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R306	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R307	1-216-809-11	METAL CHIP	100	5%	1/10W
R309	1-216-833-11	METAL CHIP	10K	5%	1/10W
R310	1-216-833-11	METAL CHIP	10K	5%	1/10W
R311	1-216-833-11	METAL CHIP	10K	5%	1/10W
R312	1-216-833-11	METAL CHIP	10K	5%	1/10W
R313	1-216-845-11	METAL CHIP	100K	5%	1/10W
R314	1-216-845-11	METAL CHIP	100K	5%	1/10W
R316	1-216-833-11	METAL CHIP	10K	5%	1/10W
R317	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R318	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R319	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R320	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R321	1-216-833-11	METAL CHIP	10K	5%	1/10W
R322	1-216-833-11	METAL CHIP	10K	5%	1/10W
R323	1-216-821-11	METAL CHIP	1K	5%	1/10W
R324	1-216-809-11	METAL CHIP	100	5%	1/10W
R325	1-216-833-11	METAL CHIP	10K	5%	1/10W
R326	1-216-833-11	METAL CHIP	10K	5%	1/10W
R328	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R329	1-216-801-11	METAL CHIP	22	5%	1/10W (RG440:AEP,UK)
R330	1-216-833-11	METAL CHIP	10K	5%	1/10W
R341	1-216-821-11	METAL CHIP	1K	5%	1/10W
R342	1-216-838-11	METAL CHIP	27K	5%	1/10W
R343	1-216-845-11	METAL CHIP	100K	5%	1/10W
R344	1-216-841-11	METAL CHIP	47K	5%	1/10W
R345	1-216-841-11	METAL CHIP	47K	5%	1/10W
R346	1-216-837-11	METAL CHIP	22K	5%	1/10W
R348	1-216-837-11	METAL CHIP	22K	5%	1/10W
R349	1-216-841-11	METAL CHIP	47K	5%	1/10W
R350	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R351	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R352	1-218-717-11	METAL CHIP	11K	5%	1/10W
R353	1-218-717-11	METAL CHIP	11K	5%	1/10W
R354	1-216-841-11	METAL CHIP	47K	5%	1/10W
R355	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R356	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R357	1-216-821-11	METAL CHIP	1K	5%	1/10W
R358	1-216-837-11	METAL CHIP	22K	5%	1/10W
R360	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R361	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R362	1-216-837-11	METAL CHIP	22K	5%	1/10W
R363	1-216-837-11	METAL CHIP	22K	5%	1/10W
R364	1-216-845-11	METAL CHIP	100K	5%	1/10W
R365	1-216-857-11	METAL CHIP	1M	5%	1/10W
R368	1-216-809-11	METAL CHIP	100	5%	1/10W
R369	1-216-809-11	METAL CHIP	100	5%	1/10W
R371	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R372	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R373	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R374	1-216-841-11	METAL CHIP	47K	5%	1/10W

MAIN | **MOTOR (LD)** | **MOTOR (TB)** | **PANEL**

Ref. No.	Part No.	Description			Remark
R376	1-216-833-11	METAL CHIP	10K	5%	1/10W
R377	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R378	1-216-833-11	METAL CHIP	10K	5%	1/10W
R379	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R380	1-216-853-11	METAL CHIP	470K	5%	1/10W
R381	1-216-837-11	METAL CHIP	22K	5%	1/10W
R382	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R383	1-216-837-11	METAL CHIP	22K	5%	1/10W
R384	1-218-717-11	METAL CHIP	11K	5%	1/10W
R386	1-216-833-11	METAL CHIP	10K	5%	1/10W
R387	1-216-834-11	METAL CHIP	12K	5%	1/10W
R388	1-216-821-11	METAL CHIP	1K	5%	1/10W
R395	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R396	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R397	1-216-833-11	METAL CHIP	10K	5%	1/10W
R398	1-216-833-11	METAL CHIP	10K	5%	1/10W
R399	1-216-833-11	METAL CHIP	10K	5%	1/10W
R400	1-216-833-11	METAL CHIP	10K	5%	1/10W
R401	1-216-833-11	METAL CHIP	10K	5%	1/10W
R402	1-216-833-11	METAL CHIP	10K	5%	1/10W
R404	1-216-833-11	METAL CHIP	10K	5%	1/10W
R405	1-216-833-11	METAL CHIP	10K	5%	1/10W
R406	1-216-837-11	METAL CHIP	22K	5%	1/10W
R407	1-216-833-11	METAL CHIP	10K	5%	1/10W
R408	1-216-833-11	METAL CHIP	10K	5%	1/10W
R409	1-216-833-11	METAL CHIP	10K	5%	1/10W
R410	1-216-833-11	METAL CHIP	10K	5%	1/10W
R421	1-216-833-11	METAL CHIP	10K	5%	1/10W
R422	1-216-806-11	METAL CHIP	56	5%	1/10W
R423	1-216-806-11	METAL CHIP	56	5%	1/10W
R424	1-216-837-11	METAL CHIP	22K	5%	1/10W
R425	1-216-837-11	METAL CHIP	22K	5%	1/10W
R426	1-216-837-11	METAL CHIP	22K	5%	1/10W
R427	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R428	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R429	1-216-821-11	METAL CHIP	1K	5%	1/10W
R430	1-216-833-11	METAL CHIP	10K	5%	1/10W
R431	1-216-847-11	METAL CHIP	150K	5%	1/10W
R432	1-216-809-11	METAL CHIP	100	5%	1/10W
⚠R433	1-215-891-11	METAL OXIDE	680	5%	2W F
⚠R434	1-215-891-11	METAL OXIDE	680	5%	2W F
R435	1-216-857-11	METAL CHIP	1M	5%	1/10W
R455	1-218-717-11	METAL CHIP	11K	5%	1/10W
R456	1-218-717-11	METAL CHIP	11K	5%	1/10W
R457	1-216-837-11	METAL CHIP	22K	5%	1/10W
R458	1-216-841-11	METAL CHIP	47K	5%	1/10W
R459	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R460	1-216-821-11	METAL CHIP	1K	5%	1/10W
R461	1-216-821-11	METAL CHIP	1K	5%	1/10W
R465	1-216-837-11	METAL CHIP	22K	5%	1/10W
R466	1-216-837-11	METAL CHIP	22K	5%	1/10W
R471	1-216-838-11	METAL CHIP	27K	5%	1/10W
R472	1-216-849-11	METAL CHIP	220K	5%	1/10W
R473	1-216-846-11	METAL CHIP	120K	5%	1/10W
R474	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R475	1-216-821-11	METAL CHIP	1K	5%	1/10W
R476	1-216-809-11	METAL CHIP	100	5%	1/10W
R477	1-216-809-11	METAL CHIP	100	5%	1/10W

Ref. No.	Part No.	Description			Remark
R480	1-216-833-11	METAL CHIP	10K	5%	1/10W
R481	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R482	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R483	1-216-821-11	METAL CHIP	1K	5%	1/10W
R484	1-216-833-11	METAL CHIP	10K	5%	1/10W
R486	1-216-809-11	METAL CHIP	100	5%	1/10W
R487	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R488	1-216-134-00	METAL CHIP	2.2	5%	1/8W
**********					
	1-687-133-11	MOTOR (LD) BOARD			
		**********			
**********					
	1-687-134-11	MOTOR (TB) BOARD			
		**********			
		< CONNECTOR >			
CN742	1-784-727-11	CONNECTOR, FFC 5P			
**********					
	A-4748-707-A	PANEL BOARD, COMPLETE (GX45)			
	A-4748-713-A	PANEL BOARD, COMPLETE (RG440)			
		**********			
	4-244-690-01	FL HOLDER (L)			
	4-244-691-01	FL HOLDER (R)			
		< CAPACITOR >			
C601	1-124-247-11	ELECT	10uF	20%	35V
C602	1-124-247-11	ELECT	10uF	20%	35V
C603	1-124-589-11	ELECT	47uF	20%	16V
C604	1-124-261-00	ELECT	10uF	20%	50V
C611	1-126-916-11	ELECT	1000uF	20%	6.3V
C612	1-115-156-11	CERAMIC CHIP	1uF		10V
C614	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C615	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C616	1-115-156-11	CERAMIC CHIP	1uF		10V
C617	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C618	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C619	1-124-234-00	ELECT	22uF	20%	16V
C620	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C621	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C622	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C635	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C636	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C637	1-124-464-11	ELECT	0.22uF	20%	50V
C638	1-124-464-11	ELECT	0.22uF	20%	50V
C639	1-126-947-11	ELECT	47uF	20%	35V
C640	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C641	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C642	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C643	1-115-156-11	CERAMIC CHIP	1uF		10V
C644	1-124-234-00	ELECT	22uF	20%	16V
C646	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C647	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C648	1-124-257-00	ELECT	2.2uF	20%	50V
C649	1-124-234-00	ELECT	22uF	20%	16V
C650	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

PANEL

Ref. No.	Part No.	Description	Remark
		< CONNECTOR >	
CN601	1-784-753-11	CONNECTOR, FFC 31P	
CN602	1-784-731-11	CONNECTOR, FFC 9P	
CN603	1-816-422-11	PIN, CONNECTOR 3P	
CN605	1-784-735-11	CONNECTOR, FFC 13P	
* CN607	1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P	
		< DIODE >	
D606	8-719-988-61	DIODE 1SS355TE-17 (GX45)	
D607	8-719-988-61	DIODE 1SS355TE-17 (GX45)	
D608	8-719-988-61	DIODE 1SS355TE-17	
D609	8-719-988-61	DIODE 1SS355TE-17	
D610	8-719-988-61	DIODE 1SS355TE-17	
D612	8-719-988-61	DIODE 1SS355TE-17	
D613	8-719-988-61	DIODE 1SS355TE-17	
D614	8-719-988-61	DIODE 1SS355TE-17	
D615	8-719-988-61	DIODE 1SS355TE-17	
D616	8-719-988-61	DIODE 1SS355TE-17	
D617	8-719-988-61	DIODE 1SS355TE-17	
D618	8-719-988-61	DIODE 1SS355TE-17	
D619	8-719-988-61	DIODE 1SS355TE-17	
D620	8-719-988-61	DIODE 1SS355TE-17	
D621	8-719-988-61	DIODE 1SS355TE-17	
D622	8-719-988-61	DIODE 1SS355TE-17	
D623	8-719-988-61	DIODE 1SS355TE-17	
D624	8-719-988-61	DIODE 1SS355TE-17	
D625	8-719-988-61	DIODE 1SS355TE-17	
D627	8-719-988-61	DIODE 1SS355TE-17	
D628	8-719-988-61	DIODE 1SS355TE-17	
D629	8-719-988-61	DIODE 1SS355TE-17	
D630	8-719-988-61	DIODE 1SS355TE-17	
D631	8-719-988-61	DIODE 1SS355TE-17	
D633	8-719-988-61	DIODE 1SS355TE-17	
D634	8-719-988-61	DIODE 1SS355TE-17	
		< COIL >	
FB601	1-412-473-21	INDUCTOR (SMALL TYPE)	
		< FLUORESCENT INDICATOR >	
FLD601	1-518-863-11	INDICATOR TUBE, FLUORESCENT	
		< IC >	
IC601	6-803-327-01	IC LC876780B-51Y0-E	
IC602	6-704-045-01	IC MM1574A	
IC603	8-759-533-04	IC M62703ML-E1	
		< JUMPER RESISTOR >	
JR604	1-216-864-11	METAL CHIP 0 5%	1/10W
JR605	1-216-864-11	METAL CHIP 0 5%	1/10W
JR606	1-216-864-11	METAL CHIP 0 5%	1/10W
JR607	1-216-864-11	METAL CHIP 0 5%	1/10W
JR608	1-216-864-11	METAL CHIP 0 5%	1/10W
JR609	1-216-864-11	METAL CHIP 0 5%	1/10W
JR610	1-216-864-11	METAL CHIP 0 5%	1/10W (GX45/RG440:AUS)
JR611	1-216-864-11	METAL CHIP 0 5%	1/10W (GX45/RG440:AUS)
JR613	1-216-864-11	METAL CHIP 0 5%	1/10W
JR614	1-216-864-11	METAL CHIP 0 5%	1/10W
JR615	1-216-864-11	METAL CHIP 0 5%	1/10W
JR617	1-216-864-11	METAL CHIP 0 5%	1/10W
JR620	1-216-864-11	METAL CHIP 0 5%	1/10W
JR621	1-216-864-11	METAL CHIP 0 5%	1/10W
JR623	1-216-864-11	METAL CHIP 0 5%	1/10W (RG440:AEP,UK)
JR625	1-216-864-11	METAL CHIP 0 5%	1/10W
JR626	1-216-864-11	METAL CHIP 0 5%	1/10W
		< DIODE >	
LED607	6-500-414-01	LED HL-30105Q2AT (CD)	
LED608	6-500-414-01	LED HL-30105Q2AT (TUNER/BAND)	
LED609	6-500-414-01	LED HL-30105Q2AT (TAPE A/B)	
LED612	6-500-414-01	LED HL-30105Q2AT (GAME)	
LED614	6-500-414-01	LED HL-30105Q2AT (POWER)	
		< TRANSISTOR >	
Q601	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q602	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q603	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q604	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q607	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q609	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q610	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q616	8-729-140-04	TRANSISTOR 2SB1116A-L	
Q617	8-729-140-04	TRANSISTOR 2SB1116A-L	
Q618	8-729-116-56	TRANSISTOR 2SB1068-L	
		< RESISTOR >	
R030	1-216-809-11	METAL CHIP 100 5%	1/10W
R031	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R032	1-216-848-11	METAL CHIP 180K 5%	1/10W
R033	1-216-837-11	METAL CHIP 22K 5%	1/10W
R034	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R035	1-216-841-11	METAL CHIP 47K 5%	1/10W
R036	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
R037	1-216-817-11	METAL CHIP 470 5%	1/10W
R039	1-216-809-11	METAL CHIP 100 5%	1/10W
R040	1-216-845-11	METAL CHIP 100K 5%	1/10W
R041	1-216-845-11	METAL CHIP 100K 5%	1/10W (GX45)
R043	1-216-845-11	METAL CHIP 100K 5%	1/10W
R044	1-216-845-11	METAL CHIP 100K 5%	1/10W
R045	1-216-845-11	METAL CHIP 100K 5%	1/10W
R046	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R047	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R048	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R050	1-216-821-11	METAL CHIP 1K 5%	1/10W
R051	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R053	1-216-841-11	METAL CHIP 47K 5%	1/10W
R054	1-216-841-11	METAL CHIP 47K 5%	1/10W
R055	1-216-841-11	METAL CHIP 47K 5%	1/10W
R056	1-216-841-11	METAL CHIP 47K 5%	1/10W
R057	1-216-841-11	METAL CHIP 47K 5%	1/10W
R058	1-216-841-11	METAL CHIP 47K 5%	1/10W
R059	1-216-841-11	METAL CHIP 47K 5%	1/10W
R060	1-216-841-11	METAL CHIP 47K 5%	1/10W

PANEL

Ref. No.	Part No.	Description			Remark
R061	1-216-841-11	METAL CHIP	47K	5%	1/10W
R062	1-216-841-11	METAL CHIP	47K	5%	1/10W
R063	1-216-841-11	METAL CHIP	47K	5%	1/10W
R064	1-216-841-11	METAL CHIP	47K	5%	1/10W
R065	1-216-841-11	METAL CHIP	47K	5%	1/10W
R066	1-216-841-11	METAL CHIP	47K	5%	1/10W
R067	1-216-841-11	METAL CHIP	47K	5%	1/10W
R068	1-216-841-11	METAL CHIP	47K	5%	1/10W
R069	1-216-841-11	METAL CHIP	47K	5%	1/10W
R070	1-216-841-11	METAL CHIP	47K	5%	1/10W
R071	1-216-841-11	METAL CHIP	47K	5%	1/10W
R072	1-216-841-11	METAL CHIP	47K	5%	1/10W
R073	1-216-841-11	METAL CHIP	47K	5%	1/10W
R074	1-216-841-11	METAL CHIP	47K	5%	1/10W
R075	1-216-841-11	METAL CHIP	47K	5%	1/10W
R076	1-216-841-11	METAL CHIP	47K	5%	1/10W
R077	1-216-841-11	METAL CHIP	47K	5%	1/10W
R078	1-216-841-11	METAL CHIP	47K	5%	1/10W
R079	1-216-841-11	METAL CHIP	47K	5%	1/10W
R080	1-216-841-11	METAL CHIP	47K	5%	1/10W
R081	1-216-841-11	METAL CHIP	47K	5%	1/10W
R082	1-216-841-11	METAL CHIP	47K	5%	1/10W
R083	1-216-841-11	METAL CHIP	47K	5%	1/10W
R084	1-216-841-11	METAL CHIP	47K	5%	1/10W
R085	1-216-841-11	METAL CHIP	47K	5%	1/10W
R086	1-216-841-11	METAL CHIP	47K	5%	1/10W
R087	1-216-820-11	METAL CHIP	820	5%	1/10W
R088	1-216-820-11	METAL CHIP	820	5%	1/10W
R089	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R090	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R601	1-216-839-11	METAL CHIP	33K	5%	1/10W
R602	1-216-809-11	METAL CHIP	100	5%	1/10W (RG440:AEP,UK)
R604	1-216-833-11	METAL CHIP	10K	5%	1/10W
R605	1-216-833-11	METAL CHIP	10K	5%	1/10W
R606	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R607	1-216-849-11	METAL CHIP	220K	5%	1/10W
R608	1-216-809-11	METAL CHIP	100	5%	1/10W (RG440:AEP,UK)
R609	1-216-833-11	METAL CHIP	10K	5%	1/10W
R610	1-216-835-11	METAL CHIP	15K	5%	1/10W
R611	1-216-809-11	METAL CHIP	100	5%	1/10W
R612	1-216-809-11	METAL CHIP	100	5%	1/10W
R613	1-216-821-11	METAL CHIP	1K	5%	1/10W
R614	1-216-821-11	METAL CHIP	1K	5%	1/10W
R615	1-216-821-11	METAL CHIP	1K	5%	1/10W
R616	1-216-817-11	METAL CHIP	470	5%	1/10W
R623	1-216-198-11	RES-CHIP	1K	5%	1/8W
R624	1-216-835-11	METAL CHIP	15K	5%	1/10W
R625	1-216-817-11	METAL CHIP	470	5%	1/10W
R626	1-216-819-11	METAL CHIP	680	5%	1/10W
R627	1-216-821-11	METAL CHIP	1K	5%	1/10W
R628	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R629	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R630	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R631	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R632	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R633	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R634	1-216-833-11	METAL CHIP	10K	5%	1/10W
R635	1-216-198-11	RES-CHIP	1K	5%	1/8W
R638	1-216-835-11	METAL CHIP	15K	5%	1/10W
R639	1-216-817-11	METAL CHIP	470	5%	1/10W
R640	1-216-819-11	METAL CHIP	680	5%	1/10W
R641	1-216-821-11	METAL CHIP	1K	5%	1/10W
R642	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R643	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R644	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R645	1-216-198-11	RES-CHIP	1K	5%	1/8W
R646	1-216-849-11	METAL CHIP	220K	5%	1/10W
R647	1-200-397-11	METAL	4.7M	5%	1/10W F
R648	1-216-819-11	METAL CHIP	680	5%	1/10W
R649	1-216-198-11	RES-CHIP	1K	5%	1/8W
R651	1-216-833-11	METAL CHIP	10K	5%	1/10W
R652	1-216-809-11	METAL CHIP	100	5%	1/10W
R653	1-216-805-11	METAL CHIP	47	5%	1/10W
R654	1-216-833-11	METAL CHIP	10K	5%	1/10W
R655	1-216-841-11	METAL CHIP	47K	5%	1/10W
R656	1-216-841-11	METAL CHIP	47K	5%	1/10W
R657	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R658	1-216-833-11	METAL CHIP	10K	5%	1/10W
R659	1-216-833-11	METAL CHIP	10K	5%	1/10W
R662	1-216-819-11	METAL CHIP	680	5%	1/10W
R663	1-216-821-11	METAL CHIP	1K	5%	1/10W
R664	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R665	1-216-809-11	METAL CHIP	100	5%	1/10W
R666	1-216-841-11	METAL CHIP	47K	5%	1/10W
R667	1-216-813-11	METAL CHIP	220	5%	1/10W
R668	1-216-809-11	METAL CHIP	100	5%	1/10W
R669	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R670	1-216-845-11	METAL CHIP	100K	5%	1/10W
R671	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R672	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R673	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R675	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R676	1-216-821-11	METAL CHIP	1K	5%	1/10W
R677	1-216-851-11	METAL CHIP	330K	5%	1/10W
R678	1-216-841-11	METAL CHIP	47K	5%	1/10W
R679	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R680	1-216-809-11	METAL CHIP	100	5%	1/10W
R681	1-216-833-11	METAL CHIP	10K	5%	1/10W
R682	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R683	1-216-833-11	METAL CHIP	10K	5%	1/10W
R684	1-216-835-11	METAL CHIP	15K	5%	1/10W
R685	1-216-837-11	METAL CHIP	22K	5%	1/10W
R686	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R687	1-216-833-11	METAL CHIP	10K	5%	1/10W
R688	1-216-835-11	METAL CHIP	15K	5%	1/10W
R689	1-216-837-11	METAL CHIP	22K	5%	1/10W
R691	1-216-833-11	METAL CHIP	10K	5%	1/10W
R692	1-216-809-11	METAL CHIP	100	5%	1/10W
R693	1-216-809-11	METAL CHIP	100	5%	1/10W
R694	1-216-809-11	METAL CHIP	100	5%	1/10W
R695	1-216-809-11	METAL CHIP	100	5%	1/10W
R696	1-216-809-11	METAL CHIP	100	5%	1/10W
R697	1-216-809-11	METAL CHIP	100	5%	1/10W
R698	1-216-809-11	METAL CHIP	100	5%	1/10W

Ref. No.	Part No.	Description			Remark
R699	1-216-821-11	METAL CHIP	1K	5%	1/10W
R902	1-216-841-11	METAL CHIP	47K	5%	1/10W
R903	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R904	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R905	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R906	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R907	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R908	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R909	1-216-837-11	METAL CHIP	22K	5%	1/10W
R910	1-216-837-11	METAL CHIP	22K	5%	1/10W
R911	1-216-837-11	METAL CHIP	22K	5%	1/10W
R912	1-216-837-11	METAL CHIP	22K	5%	1/10W
R913	1-216-837-11	METAL CHIP	22K	5%	1/10W
R914	1-216-837-11	METAL CHIP	22K	5%	1/10W
R915	1-216-833-11	METAL CHIP	10K	5%	1/10W
R916	1-216-821-11	METAL CHIP	1K	5%	1/10W
R917	1-216-833-11	METAL CHIP	10K	5%	1/10W
R918	1-216-821-11	METAL CHIP	1K	5%	1/10W
R919	1-216-833-11	METAL CHIP	10K	5%	1/10W
R920	1-216-821-11	METAL CHIP	1K	5%	1/10W
R921	1-216-841-11	METAL CHIP	47K	5%	1/10W
R922	1-218-717-11	METAL CHIP	11K	5%	1/10W
R923	1-218-717-11	METAL CHIP	11K	5%	1/10W
R924	1-218-717-11	METAL CHIP	11K	5%	1/10W
R925	1-218-717-11	METAL CHIP	11K	5%	1/10W
R926	1-216-837-11	METAL CHIP	22K	5%	1/10W
R927	1-216-837-11	METAL CHIP	22K	5%	1/10W
R931	1-216-813-11	METAL CHIP	220	5%	1/10W
R932	1-216-182-00	RES-CHIP	220	5%	1/8W (GX45)
R933	1-216-182-00	RES-CHIP	220	5%	1/8W (GX45)
R934	1-216-182-00	RES-CHIP	220	5%	1/8W (GX45)
R937	1-216-198-11	RES-CHIP	1K	5%	1/8W
R938	1-216-198-11	RES-CHIP	1K	5%	1/8W
R939	1-216-198-11	RES-CHIP	1K	5%	1/8W
R940	1-216-198-11	RES-CHIP	1K	5%	1/8W
		< VIBRATOR >			
RES601	1-795-880-11	VIBRATOR, CERAMIC (8.64MHz)			
		< SWITCH >			
S601	1-762-875-21	SWITCH, KEYBOARD (▮▮)			
S602	1-762-875-21	SWITCH, KEYBOARD (■)			
S603	1-762-875-21	SWITCH, KEYBOARD (▶▶ +)			
S604	1-762-875-21	SWITCH, KEYBOARD (▶▶▮)			
S605	1-762-875-21	SWITCH, KEYBOARD (ALBUM +)			
S606	1-762-875-21	SWITCH, KEYBOARD (GAME MIXING)			
S607	1-762-875-21	SWITCH, KEYBOARD (ALBUM –)			
S608	1-762-875-21	SWITCH, KEYBOARD (▮◀◀)			
S609	1-762-875-21	SWITCH, KEYBOARD (◀◀ –)			
S612	1-762-875-21	SWITCH, KEYBOARD (REC PAUSE/START)			
S614	1-762-875-21	SWITCH, KEYBOARD (POWER)			
S615	1-762-875-21	SWITCH, KEYBOARD (DISPLAY)			
S616	1-762-875-21	SWITCH, KEYBOARD (▷)			
S617	1-762-875-21	SWITCH, KEYBOARD (DISC 1)			
S618	1-762-875-21	SWITCH, KEYBOARD (DISC 2)			
S619	1-762-875-21	SWITCH, KEYBOARD (DISC 3)			
S620	1-762-875-21	SWITCH, KEYBOARD (DISC SKIP/EX-CHANGE)			
S621	1-762-875-21	SWITCH, KEYBOARD (⏏)			
S623	1-762-875-21	SWITCH, KEYBOARD (MOVIE EQ)			
S627	1-762-875-21	SWITCH, KEYBOARD (CD)			
S628	1-762-875-21	SWITCH, KEYBOARD (TUNER/BAND)			
S629	1-762-875-21	SWITCH, KEYBOARD (TAPE A/B)			
S630	1-762-875-21	SWITCH, KEYBOARD (GAME)			
S634	1-762-875-21	SWITCH, KEYBOARD (CD SYNC)			
S636	1-762-875-21	SWITCH, KEYBOARD (EFFECT ON/OFF)			
S637	1-762-875-21	SWITCH, KEYBOARD (MUSIC EQ)			
S638	1-762-875-21	SWITCH, KEYBOARD (GAME EQ)			
S639	1-762-875-21	SWITCH, KEYBOARD (GROOVE)			
		< ROTARY ENCODER >			
VR601	1-477-194-11	ENCODER, ROTARY (12 TYPE) (VOLUME)			
		< VIBRATOR >			
X601	1-760-252-12	VIBRATOR, CRYSTAL (32.768kHz)			
**********					
	A-4748-696-A	POWER AMP BOARD, COMPLETE (GX45)			
	A-4748-701-A	POWER AMP BOARD, COMPLETE (RG440)			
		**********			
		< CAPACITOR >			
C1	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C2	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C3	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C4	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C5	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C6	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C7	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C8	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C9	1-135-516-11	ELECT	3300uF	20%	63V (GX45)
C10	1-135-516-11	ELECT	3300uF	20%	63V (GX45)
C11	1-126-955-11	ELECT	4700uF	20%	35V
C12	1-126-955-11	ELECT	4700uF	20%	35V
C13	1-104-665-11	ELECT	100uF	20%	25V
C22	1-126-959-11	ELECT	0.47uF	20%	50V
C23	1-126-957-11	ELECT	0.22uF	20%	50V
C24	1-126-947-11	ELECT	47uF	20%	25V
C25	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C26	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C30	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C31	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C33	1-128-552-51	ELECT	47uF	20%	63V
C34	1-128-552-51	ELECT	47uF	20%	63V
C35	1-164-344-11	CERAMIC CHIP	0.068uF	10%	25V
C37	1-128-552-51	ELECT	47uF	20%	63V
C40	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C41	1-128-552-51	ELECT	47uF	20%	63V
C42	1-162-945-11	CERAMIC CHIP	22PF	5%	50V
C43	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C45	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C501	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V

POWER AMP

Ref. No.	Part No.	Description			Remark
C502	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C503	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C504	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C505	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C506	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C507	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C508	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C509	1-164-733-11	CERAMIC CHIP	820PF	10%	50V
C510	1-164-733-11	CERAMIC CHIP	820PF	10%	50V
C511	1-126-966-11	ELECT	33uF	20%	35V
C512	1-126-966-11	ELECT	33uF	20%	35V
C513	1-126-965-11	ELECT	22uF	20%	50V
C514	1-126-965-11	ELECT	22uF	20%	50V
C517	1-126-960-11	ELECT	1uF	20%	50V
C518	1-126-960-11	ELECT	1uF	20%	50V
C519	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C520	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C521	1-126-961-11	ELECT	2.2uF	20%	50V
C522	1-126-961-11	ELECT	2.2uF	20%	50V
C523	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C524	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C525	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C526	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C527	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C528	1-126-961-11	ELECT	2.2uF	20%	50V (GX45)
C529	1-126-961-11	ELECT	2.2uF	20%	50V
C530	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C531	1-104-665-11	ELECT	100uF	20%	10V
C532	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C533	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C534	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C535	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C538	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C540	1-126-964-11	ELECT	10uF	20%	50V
C541	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C542	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C543	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C544	1-165-319-11	CERAMIC CHIP	0.1uF		50V
		< CONNECTOR >			
CN501	1-778-981-21	CONNECTOR, BOARD TO BOARD 13P			
CN502	1-778-981-21	CONNECTOR, BOARD TO BOARD 13P			
		< DIODE >			
D2	6-500-340-01	DIODE G5SBA60L-6088			
D3	6-500-378-01	DIODE 1N5402GW(F20)			
D4	6-500-378-01	DIODE 1N5402GW(F20)			
D5	6-500-378-01	DIODE 1N5402GW(F20)			
D6	6-500-378-01	DIODE 1N5402GW(F20)			
D11	8-719-988-61	DIODE 1SS355TE-17			
D12	6-500-334-01	DIODE MC2836			
D13	6-500-335-01	DIODE MC2838			
D16	6-500-335-01	DIODE MC2838			
D17	6-500-334-01	DIODE MC2836			
D18	6-500-335-01	DIODE MC2838			
D19	6-500-334-01	DIODE MC2836			
D20	6-500-335-01	DIODE MC2838			

Ref. No.	Part No.	Description			Remark
D23	8-719-988-61	DIODE 1SS355TE-17			
D24	8-719-988-61	DIODE 1SS355TE-17			
D25	8-719-083-67	DIODE UDZS-TE17-20B			
D26	6-500-378-01	DIODE 1N5402GW(F20) (RG440)			
D27	6-500-378-01	DIODE 1N5402GW(F20) (RG440)			
D29	8-719-988-61	DIODE 1SS355TE-17			
D30	8-719-083-52	DIODE UDZS-TE17-16B			
D31	8-719-988-61	DIODE 1SS355TE-17			
D32	8-719-988-61	DIODE 1SS355TE-17			
D33	8-719-988-61	DIODE 1SS355TE-17			
D34	8-719-988-61	DIODE 1SS355TE-17			
D35	8-719-988-61	DIODE 1SS355TE-17			
D36	8-719-988-61	DIODE 1SS355TE-17			
D37	8-719-988-61	DIODE 1SS355TE-17			
D38	8-719-988-61	DIODE 1SS355TE-17			
D39	8-719-988-61	DIODE 1SS355TE-17			
D40	8-719-988-61	DIODE 1SS355TE-17			
D41	8-719-312-08	DIODE FMB-G16L (GX45)			
D42	8-719-312-08	DIODE FMB-G16L (GX45)			
D501	6-500-334-01	DIODE MC2836			
D502	6-500-334-01	DIODE MC2836			
D503	6-500-335-01	DIODE MC2838			
D504	6-500-335-01	DIODE MC2838			
D505	8-719-970-83	DIODE HSS82-TJ			
D506	8-719-970-83	DIODE HSS82-TJ			
D507	8-719-988-61	DIODE 1SS355TE-17			
D508	8-719-988-61	DIODE 1SS355TE-17			
D509	6-500-335-01	DIODE MC2838			
D510	6-500-334-01	DIODE MC2836			
D511	8-719-988-61	DIODE 1SS355TE-17			
D513	8-719-988-61	DIODE 1SS355TE-17			
D514	8-719-988-61	DIODE 1SS355TE-17			
D515	8-719-083-70	DIODE UDZS-TE17-27B			
		< EARTH TERMINAL >			
* EP01	1-537-738-21	TERMINAL, EARTH			
* EP501	1-537-738-21	TERMINAL, EARTH			
		< TERMINAL BOARD >			
JK502	1-694-884-11	TERMINAL BOARD (4P) (SPEAKER)			
		< JUMPER RESISTOR >			
JR2	1-216-864-11	METAL CHIP	0	5%	1/10W
JR501	1-216-864-11	METAL CHIP	0	5%	1/10W
JR511	1-216-864-11	METAL CHIP	0	5%	1/10W
JR512	1-216-864-11	METAL CHIP	0	5%	1/10W
JR513	1-216-864-11	METAL CHIP	0	5%	1/10W
JR514	1-216-864-11	METAL CHIP	0	5%	1/10W
JR515	1-216-864-11	METAL CHIP	0	5%	1/10W
JR516	1-216-864-11	METAL CHIP	0	5%	1/10W
JR517	1-216-864-11	METAL CHIP	0	5%	1/10W
		< COIL >			
L501	1-422-009-13	COIL, AIR-CORE			
L502	1-422-009-13	COIL, AIR-CORE			

Ref. No.	Part No.	Description			Remark
		< TRANSISTOR >			
Q5	6-550-289-01	TRANSISTOR 2SA1235F			
Q6	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q7	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q8	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q9	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q10	6-550-316-01	TRANSISTOR 2SB792A(RS)			
Q11	8-729-055-91	TRANSISTOR SRA2202SF			
Q12	6-550-645-01	TRANSISTOR 2SC3143K4-TB			
Q13	6-550-316-01	TRANSISTOR 2SB792A(RS)			
Q17	6-550-289-01	TRANSISTOR 2SA1235F			
Q18	6-550-293-01	FET 2SK2937			
Q19	6-550-293-01	FET 2SK2937			
Q20	6-550-317-01	TRANSISTOR 2SD814A(RS)			
Q21	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q22	6-550-316-01	TRANSISTOR 2SB792A(RS)			
Q23	6-550-289-01	TRANSISTOR 2SA1235F			
Q24	6-550-289-01	TRANSISTOR 2SA1235F			
Q501	6-550-291-01	TRANSISTOR FN1016			
Q502	6-550-291-01	TRANSISTOR FN1016			
Q503	6-550-292-01	TRANSISTOR FP1016			
Q504	6-550-292-01	TRANSISTOR FP1016			
Q505	6-550-316-01	TRANSISTOR 2SB792A(RS)			
Q506	6-550-316-01	TRANSISTOR 2SB792A(RS)			
Q507	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q508	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q509	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q510	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q511	6-550-413-01	TRANSISTOR 2SC3478LK			
Q512	6-550-413-01	TRANSISTOR 2SC3478LK			
Q513	6-550-413-01	TRANSISTOR 2SC3478LK			
Q514	6-550-413-01	TRANSISTOR 2SC3478LK			
Q515	6-550-317-01	TRANSISTOR 2SD814A(RS)			
Q516	6-550-317-01	TRANSISTOR 2SD814A(RS)			
Q517	6-550-316-01	TRANSISTOR 2SB792A(RS)			
Q518	6-550-316-01	TRANSISTOR 2SB792A(RS)			
Q519	6-550-316-01	TRANSISTOR 2SB792A(RS)			
Q520	6-550-316-01	TRANSISTOR 2SB792A(RS)			
Q521	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q522	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q523	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q524	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q525	8-729-052-79	TRANSISTOR 2SD1306NETL			
Q526	8-729-052-79	TRANSISTOR 2SD1306NETL			
Q527	6-550-289-01	TRANSISTOR 2SA1235F			
Q528	8-729-052-79	TRANSISTOR 2SD1306NETL (GX45)			
Q529	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q530	6-550-289-01	TRANSISTOR 2SA1235F			
Q534	6-550-296-01	TRANSISTOR 2SA1980G			
Q535	6-550-296-01	TRANSISTOR 2SA1980G			
Q536	6-550-289-01	TRANSISTOR 2SA1235F			
		< RESISTOR >			
R4	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R6	1-216-838-11	METAL CHIP	27K	5%	1/10W
R7	1-216-838-11	METAL CHIP	27K	5%	1/10W
R8	1-216-838-11	METAL CHIP	27K	5%	1/10W
R9	1-216-838-11	METAL CHIP	27K	5%	1/10W
R12	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R13	1-216-206-00	RES-CHIP	2.2K	5%	1/8W
R14	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R16	1-216-821-11	METAL CHIP	1K	5%	1/10W
R17	1-216-821-11	METAL CHIP	1K	5%	1/10W
R18	1-216-809-11	METAL CHIP	100	5%	1/10W
R19	1-216-835-11	METAL CHIP	15K	5%	1/10W
R20	1-216-833-11	METAL CHIP	10K	5%	1/10W
R21	1-216-835-11	METAL CHIP	15K	5%	1/10W
R22	1-216-839-11	METAL CHIP	33K	5%	1/10W
R23	1-216-839-11	METAL CHIP	33K	5%	1/10W
R26	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R27	1-216-833-11	METAL CHIP	10K	5%	1/10W
R29	1-216-138-00	METAL CHIP	3.3	5%	1/8W
R31	1-216-138-00	METAL CHIP	3.3	5%	1/8W
R32	1-216-840-11	METAL CHIP	39K	5%	1/10W
R33	1-216-839-11	METAL CHIP	33K	5%	1/10W
R34	1-216-843-11	METAL CHIP	68K	5%	1/10W
R35	1-216-840-11	METAL CHIP	39K	5%	1/10W
R36	1-216-839-11	METAL CHIP	33K	5%	1/10W
R37	1-216-843-11	METAL CHIP	68K	5%	1/10W
R38	1-216-833-11	METAL CHIP	10K	5%	1/10W
R39	1-216-845-11	METAL CHIP	100K	5%	1/10W
R40	1-216-833-11	METAL CHIP	10K	5%	1/10W
R41	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R42	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R43	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R44	1-216-236-11	RES-CHIP	39K	5%	1/8W
R45	1-216-841-11	METAL CHIP	47K	5%	1/10W
R46	1-216-841-11	METAL CHIP	47K	5%	1/10W
R47	1-216-837-11	METAL CHIP	22K	5%	1/10W
R48	1-216-849-11	METAL CHIP	220K	5%	1/10W
R49	1-216-849-11	METAL CHIP	220K	5%	1/10W
R50	1-216-833-11	METAL CHIP	10K	5%	1/10W
R51	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R52	1-216-841-11	METAL CHIP	47K	5%	1/10W
R53	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R54	1-216-835-11	METAL CHIP	15K	5%	1/10W
R55	1-260-101-11	CARBON	1.5K	5%	1/2W F
R56	1-249-420-11	CARBON	1.8K	5%	1/4W
R58	1-216-186-00	RES-CHIP	330	5%	1/8W
R59	1-216-184-00	RES-CHIP	270	5%	1/8W
R60	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R61	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R62	1-216-833-11	METAL CHIP	10K	5%	1/10W
R63	1-216-833-11	METAL CHIP	10K	5%	1/10W
R64	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R65	1-216-833-11	METAL CHIP	10K	5%	1/10W
R66	1-216-833-11	METAL CHIP	10K	5%	1/10W
R67	1-216-841-11	METAL CHIP	47K	5%	1/10W
R68	1-216-833-11	METAL CHIP	10K	5%	1/10W
R69	1-216-833-11	METAL CHIP	10K	5%	1/10W
R70	1-216-835-11	METAL CHIP	15K	5%	1/10W
R71	1-216-835-11	METAL CHIP	15K	5%	1/10W
R72	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R73	1-216-236-11	RES-CHIP	39K	5%	1/8W
R74	1-216-238-11	RES-CHIP	47K	5%	1/8W
R75	1-216-825-11	METAL CHIP	2.2K	5%	1/10W

POWER AMP

Ref. No.	Part No.	Description			Remark
R76	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R77	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R78	1-216-234-00	RES-CHIP	33K	5%	1/8W
R79	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R81	1-260-111-11	CARBON	10K	5%	1/2W F
R82	1-216-833-11	METAL CHIP	10K	5%	1/10W
R83	1-216-208-00	RES-CHIP	2.7K	5%	1/8W
R85	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R86	1-260-105-11	CARBON	3.3K	5%	1/2W F
R90	1-216-222-00	RES-CHIP	10K	5%	1/8W
R91	1-216-178-00	RES-CHIP	150	5%	1/8W
R92	1-260-105-11	CARBON	3.3K	5%	1/2W F
R93	1-216-206-00	RES-CHIP	2.2K	5%	1/8W
R94	1-216-833-11	METAL CHIP	10K	5%	1/10W
R95	1-260-111-11	CARBON	10K	5%	1/2W F
R96	1-216-214-00	RES-CHIP	4.7K	5%	1/8W
R97	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R98	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R99	1-260-105-11	CARBON	3.3K	5%	1/2W F
R100	1-216-138-00	METAL CHIP	3.3	5%	1/8W
R102	1-216-216-00	RES-CHIP	5.6K	5%	1/8W
R103	1-216-244-00	RES-CHIP	82K	5%	1/8W
R104	1-216-244-00	RES-CHIP	82K	5%	1/8W
R105	1-216-244-00	RES-CHIP	82K	5%	1/8W
R106	1-216-244-00	RES-CHIP	82K	5%	1/8W
R107	1-216-244-00	RES-CHIP	82K	5%	1/8W
R108	1-216-244-00	RES-CHIP	82K	5%	1/8W
R109	1-216-244-00	RES-CHIP	82K	5%	1/8W
R110	1-216-244-00	RES-CHIP	82K	5%	1/8W
R500	1-216-821-11	METAL CHIP	1K	5%	1/10W
⚠R501	1-245-545-11	METAL OXIDE	0.22	5%	3W F
⚠R502	1-245-545-11	METAL OXIDE	0.22	5%	3W F
⚠R503	1-245-545-11	METAL OXIDE	0.22	5%	3W F
⚠R504	1-245-545-11	METAL OXIDE	0.22	5%	3W F
R505	1-216-809-11	METAL CHIP	100	5%	1/10W
R506	1-216-809-11	METAL CHIP	100	5%	1/10W
R507	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R508	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R509	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R510	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R511	1-216-821-11	METAL CHIP	1K	5%	1/10W
R512	1-216-821-11	METAL CHIP	1K	5%	1/10W
R513	1-216-835-11	METAL CHIP	15K	5%	1/10W
R514	1-216-835-11	METAL CHIP	15K	5%	1/10W
R515	1-216-815-11	METAL CHIP	330	5%	1/10W
R516	1-216-815-11	METAL CHIP	330	5%	1/10W
R517	1-216-804-11	METAL CHIP	39	5%	1/10W
R518	1-216-804-11	METAL CHIP	39	5%	1/10W
R519	1-216-804-11	METAL CHIP	39	5%	1/10W
R520	1-216-804-11	METAL CHIP	39	5%	1/10W
R521	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R522	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R523	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R524	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R525	1-216-821-11	METAL CHIP	1K	5%	1/10W
R526	1-216-821-11	METAL CHIP	1K	5%	1/10W
R527	1-216-841-11	METAL CHIP	47K	5%	1/10W
R528	1-216-841-11	METAL CHIP	47K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R529	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R530	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R531	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R532	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R533	1-216-809-11	METAL CHIP	100	5%	1/10W
R534	1-216-809-11	METAL CHIP	100	5%	1/10W
R535	1-216-809-11	METAL CHIP	100	5%	1/10W
R536	1-216-809-11	METAL CHIP	100	5%	1/10W
R537	1-260-328-11	CARBON	1K	5%	1/2W F
R538	1-260-328-11	CARBON	1K	5%	1/2W F
R539	1-216-833-11	METAL CHIP	10K	5%	1/10W
R540	1-216-833-11	METAL CHIP	10K	5%	1/10W
R541	1-216-206-00	RES-CHIP	2.2K	5%	1/8W
R542	1-216-206-00	RES-CHIP	2.2K	5%	1/8W
R543	1-216-206-00	RES-CHIP	2.2K	5%	1/8W
R544	1-216-206-00	RES-CHIP	2.2K	5%	1/8W
R545	1-216-809-11	METAL CHIP	100	5%	1/10W
R546	1-216-809-11	METAL CHIP	100	5%	1/10W
R547	1-216-838-11	METAL CHIP	27K	5%	1/10W
R548	1-216-838-11	METAL CHIP	27K	5%	1/10W
R549	1-216-818-11	METAL CHIP	560	5%	1/10W
R550	1-216-818-11	METAL CHIP	560	5%	1/10W
R553	1-216-838-11	METAL CHIP	27K	5%	1/10W
R554	1-216-838-11	METAL CHIP	27K	5%	1/10W
R555	1-216-841-11	METAL CHIP	47K	5%	1/10W
R556	1-216-841-11	METAL CHIP	47K	5%	1/10W
R557	1-216-821-11	METAL CHIP	1K	5%	1/10W
R558	1-216-821-11	METAL CHIP	1K	5%	1/10W
R559	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
R560	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
R561	1-216-843-11	METAL CHIP	68K	5%	1/10W
R562	1-216-857-11	METAL CHIP	1M	5%	1/10W
R563	1-216-214-00	RES-CHIP	4.7K	5%	1/8W
R564	1-216-214-00	RES-CHIP	4.7K	5%	1/8W
R565	1-216-821-11	METAL CHIP	1K	5%	1/10W (GX45)
R566	1-216-828-11	METAL CHIP	3.9K	5%	1/10W (GX45)
R567	1-216-214-00	RES-CHIP	4.7K	5%	1/8W
R568	1-216-214-00	RES-CHIP	4.7K	5%	1/8W
R569	1-216-853-11	METAL CHIP	470K	5%	1/10W
R570	1-260-076-21	CARBON	10	5%	1/2W F
R571	1-260-076-21	CARBON	10	5%	1/2W F
R572	1-216-156-00	RES-CHIP	18	5%	1/8W
R573	1-216-156-00	RES-CHIP	18	5%	1/8W
R574	1-216-182-00	RES-CHIP	220	5%	1/8W
R575	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R576	1-216-837-11	METAL CHIP	22K	5%	1/10W
R577	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R578	1-216-182-00	RES-CHIP	220	5%	1/8W
R580	1-216-150-11	RES-CHIP	10	5%	1/8W
R581	1-216-246-00	RES-CHIP	100K	5%	1/8W
R589	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R591	1-216-841-11	METAL CHIP	47K	5%	1/10W
R592	1-216-835-11	METAL CHIP	15K	5%	1/10W
R593	1-216-833-11	METAL CHIP	10K	5%	1/10W
R594	1-216-833-11	METAL CHIP	10K	5%	1/10W
R599	1-216-841-11	METAL CHIP	47K	5%	1/10W

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

POWER AMP | REMOTE | SENSOR | SUBWOOFER

Ref. No.	Part No.	Description			Remark
R601	1-216-156-00	RES-CHIP	18	5%	1/8W
R602	1-216-156-00	RES-CHIP	18	5%	1/8W
R603	1-216-156-00	RES-CHIP	18	5%	1/8W
R604	1-216-156-00	RES-CHIP	18	5%	1/8W
		< RELAY >			
RY501	1-755-373-11	RELAY			
		< THERMISTOR >			
TH501	1-805-217-11	THERMISTOR (1012)			
TH502	1-805-217-11	THERMISTOR (1012)			
**********					
		REMOTE BOARD			
		**********			
		< CONNECTOR >			
CN604	1-816-423-11	SOCKET, CONNECTOR 3P			
		< IC >			
RM601	6-600-174-01	IC RPM7240-H4 (IR)			
**********					
	1-687-132-11	SENSOR BOARD			
		**********			
		< CONNECTOR >			
CN731	1-785-329-21	PIN, CONNECTOR (LIGHT ANGLE) 3P			
		< IC >			
IC731	6-600-022-01	IC RPI-576			
**********					
	A-4732-797-A	SUBWOOFER BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C401	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C402	1-126-960-11	ELECT	1uF	20%	50V
C404	1-126-965-11	ELECT	22uF	20%	50V
C405	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C406	1-126-966-11	ELECT	33uF	20%	35V
C407	1-164-733-11	CERAMIC CHIP	820PF	10%	50V
C408	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C409	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C410	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C411	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C412	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C413	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C414	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C415	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C416	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C417	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C421	1-128-552-51	ELECT	47uF	20%	63V
C424	1-164-344-11	CERAMIC CHIP	0.068uF	10%	25V
C425	1-126-947-11	ELECT	47uF	20%	35V (RG440:AEP,UK)
C425	1-128-552-51	ELECT	47uF	20%	63V (GX45/RG440:AUS)
C428	1-126-963-11	ELECT	4.7uF	20%	50V
C429	1-126-947-11	ELECT	47uF	20%	35V (RG440:AEP,UK)
C429	1-128-552-51	ELECT	47uF	20%	63V (GX45/RG440:AUS)
C430	1-128-552-51	ELECT	47uF	20%	63V
C431	1-162-945-11	CERAMIC CHIP	22PF	5%	50V
C432	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
		< CONNECTOR >			
* CN401	1-564-516-11	PLUG, CONNECTOR 13P			
* CN402	1-564-517-11	PLUG, CONNECTOR 2P (CONTROL)			
		< DIODE >			
D401	8-719-988-61	DIODE 1SS355TE-17			
D402	8-719-988-61	DIODE 1SS355TE-17			
D403	6-500-334-01	DIODE MC2836			
D404	6-500-334-01	DIODE MC2836			
D405	8-719-970-83	DIODE HSS82-TJ			
D406	8-719-988-61	DIODE 1SS355TE-17			
D407	8-719-988-61	DIODE 1SS355TE-17			
D408	8-719-988-61	DIODE 1SS355TE-17			
D409	8-719-988-61	DIODE 1SS355TE-17			
D410	8-719-988-61	DIODE 1SS355TE-17			
D411	8-719-083-52	DIODE UDZS-TE17-16B			
D412	8-719-988-61	DIODE 1SS355TE-17			
D413	8-719-988-61	DIODE 1SS355TE-17			
D414	8-719-988-61	DIODE 1SS355TE-17			
D415	8-719-083-67	DIODE UDZS-TE17-20B			
D416	6-500-802-01	DIODE 1N5042TM (RG440:AEP,UK)			
D416	8-719-312-08	DIODE FMB-G16L (GX45/RG440:AUS)			
D417	8-719-978-33	DIODE UDZS-TE17-6.8B			
D418	8-719-988-61	DIODE 1SS355TE-17			
D419	6-500-802-01	DIODE 1N5042TM (RG440:AEP,UK)			
D419	8-719-312-08	DIODE FMB-G16L (GX45/RG440:AUS)			
D420	8-719-988-61	DIODE 1SS355TE-17			
D421	8-719-988-61	DIODE 1SS355TE-17			
D422	8-719-988-61	DIODE 1SS355TE-17			
D423	8-719-988-61	DIODE 1SS355TE-17			
D424	6-500-334-01	DIODE MC2836			
D425	6-500-584-01	DIODE MC2838TP-1F			
		< EARTH TERMINAL >			
* EP401	1-537-738-21	TERMINAL, EARTH			
		< JACK >			
JK401	1-774-785-11	JACK, PIN 1P (SUBWOOFER OUT)			
		< JUMPER RESISTOR >			
JR418	1-216-864-11	METAL CHIP	0	5%	1/10W
JR423	1-216-864-11	METAL CHIP	0	5%	1/10W
JR437	1-216-864-11	METAL CHIP	0	5%	1/10W
		< COIL >			
L401	1-422-009-13	COIL, AIR-CORE			

SUBWOOFER

Ref. No.	Part No.	Description			Remark
		< TRANSISTOR >			
Q401	6-550-316-01	TRANSISTOR 2SB792A(RS)			
Q402	6-550-316-01	TRANSISTOR 2SB792A(RS)			
Q403	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q404	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q405	6-550-317-01	TRANSISTOR 2SD814A(RS)			
Q406	6-550-413-01	TRANSISTOR 2SC3478LK			
Q407	6-550-413-01	TRANSISTOR 2SC3478LK			
Q408	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q409	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q410	6-550-291-01	TRANSISTOR FN1016			
Q411	6-550-292-01	TRANSISTOR FP1016			
Q412	6-550-316-01	TRANSISTOR 2SB792A(RS)			
Q413	6-550-289-01	TRANSISTOR 2SA1235F			
Q414	6-550-645-01	TRANSISTOR 2SC3143K4-TB			
Q415	6-550-316-01	TRANSISTOR 2SB792A(RS)			
Q416	6-550-293-01	FET 2SK2937			
Q417	6-550-317-01	TRANSISTOR 2SD814A(RS)			
Q419	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q420	6-550-316-01	TRANSISTOR 2SB792A(RS)			
Q421	8-729-055-91	TRANSISTOR SRA2202SF			
Q422	6-550-289-01	TRANSISTOR 2SA1235F			
Q423	6-550-289-01	TRANSISTOR 2SA1235F			
Q424	6-550-316-01	TRANSISTOR 2SB792A(RS)			
Q425	6-550-289-01	TRANSISTOR 2SA1235F			
Q426	6-550-293-01	FET 2SK2937			
		< RESISTOR >			
R401	1-216-841-11	METAL CHIP	47K	5%	1/10W
R402	1-216-838-11	METAL CHIP	27K	5%	1/10W
R404	1-216-818-11	METAL CHIP	560	5%	1/10W
R405	1-216-206-00	RES-CHIP	2.2K	5%	1/8W
R406	1-216-206-00	RES-CHIP	2.2K	5%	1/8W
R407	1-216-198-00	RES-CHIP	1K	5%	1/8W
R408	1-216-809-11	METAL CHIP	100	5%	1/10W
R409	1-216-232-00	RES-CHIP	27K	5%	1/8W
R410	1-216-833-11	METAL CHIP	10K	5%	1/10W
R411	1-216-809-11	METAL CHIP	100	5%	1/10W
R412	1-216-809-11	METAL CHIP	100	5%	1/10W
R413	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R414	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R415	1-216-841-11	METAL CHIP	47K	5%	1/10W
R416	1-216-821-11	METAL CHIP	1K	5%	1/10W
R417	1-216-804-11	METAL CHIP	39	5%	1/10W
R419	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R420	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R421	1-216-804-11	METAL CHIP	39	5%	1/10W
R422	1-216-815-11	METAL CHIP	330	5%	1/10W
R424	1-216-809-11	METAL CHIP	100	5%	1/10W
R425	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
⚠R426	1-245-545-11	METAL OXIDE	0.22	5%	3W F
⚠R427	1-245-545-11	METAL OXIDE	0.22	5%	3W F
R428	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R429	1-216-821-11	METAL CHIP	1K	5%	1/10W
R430	1-216-835-11	METAL CHIP	15K	5%	1/10W
⚠R431	1-260-076-11	CARBON	10	5%	1/2W F
R432	1-216-158-00	RES-CHIP	22	5%	1/8W
⚠R433	1-260-087-11	CARBON	100	5%	1/2W F

Ref. No.	Part No.	Description			Remark
R434	1-216-833-11	METAL CHIP	10K	5%	1/10W
R435	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R436	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R438	1-216-158-00	RES-CHIP	22	5%	1/8W
R440	1-216-841-11	METAL CHIP	47K	5%	1/10W
R441	1-216-833-11	METAL CHIP	10K	5%	1/10W
R442	1-216-833-11	METAL CHIP	10K	5%	1/10W
R443	1-216-833-11	METAL CHIP	10K	5%	1/10W
R444	1-216-833-11	METAL CHIP	10K	5%	1/10W
R447	1-216-208-00	RES-CHIP	2.7K	5%	1/8W
R448	1-216-208-00	RES-CHIP	2.7K	5%	1/8W
R449	1-216-208-00	RES-CHIP	2.7K	5%	1/8W
R450	1-216-208-00	RES-CHIP	2.7K	5%	1/8W
R451	1-216-230-00	RES-CHIP	22K	5%	1/8W
R452	1-216-206-00	RES-CHIP	2.2K	5%	1/8W
R453	1-216-208-00	RES-CHIP	2.7K	5%	1/8W
R454	1-216-178-00	RES-CHIP	150	5%	1/8W
R455	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R456	1-216-222-00	RES-CHIP	10K	5%	1/8W
R457	1-216-210-00	RES-CHIP	3.3K	5%	1/8W
R458	1-216-833-11	METAL CHIP	10K	5%	1/10W
R459	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R460	1-216-230-00	RES-CHIP	22K	5%	1/8W
R461	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R462	1-216-833-11	METAL CHIP	10K	5%	1/10W
R463	1-216-230-00	RES-CHIP	22K	5%	1/8W
R464	1-216-230-00	RES-CHIP	22K	5%	1/8W
R465	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R466	1-216-833-11	METAL CHIP	10K	5%	1/10W
R467	1-216-835-11	METAL CHIP	15K	5%	1/10W
R468	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R469	1-216-841-11	METAL CHIP	47K	5%	1/10W
R470	1-216-837-11	METAL CHIP	22K	5%	1/10W
R471	1-216-849-11	METAL CHIP	220K	5%	1/10W
R472	1-216-849-11	METAL CHIP	220K	5%	1/10W
R473	1-216-833-11	METAL CHIP	10K	5%	1/10W
R474	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R475	1-216-841-11	METAL CHIP	47K	5%	1/10W
R476	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R477	1-216-833-11	METAL CHIP	10K	5%	1/10W
R478	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R479	1-216-816-11	METAL CHIP	390	5%	1/10W
R480	1-216-222-00	RES-CHIP	10K	5%	1/8W
R481	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R482	1-216-835-11	METAL CHIP	15K	5%	1/10W
R483	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R484	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R485	1-216-234-00	RES-CHIP	33K	5%	1/8W
R486	1-216-238-11	RES-CHIP	47K	5%	1/8W
R487	1-216-186-00	RES-CHIP	330	5%	1/8W
R488	1-216-222-00	RES-CHIP	10K	5%	1/8W
R489	1-216-238-11	RES-CHIP	47K	5%	1/8W
R490	1-216-837-11	METAL CHIP	22K	5%	1/10W
R491	1-216-832-11	METAL CHIP	8.2K	5%	1/10W
R492	1-216-857-11	METAL CHIP	1M	5%	1/10W
R493	1-216-833-11	METAL CHIP	10K	5%	1/10W
R494	1-216-816-11	METAL CHIP	390	5%	1/10W
R496	1-216-222-00	RES-CHIP	10K	5%	1/8W

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

SUBWOOFER | SW | TRANS | VIDEO OUT | 6 STREAM LED

Ref. No.	Part No.	Description			Remark
		< RELAY >			
RY401	1-755-373-11	RELAY			
		< THERMISTOR >			
TH401	1-805-217-11	THERMISTOR (1012)			
**********					
	1-687-669-11	SW BOARD			
		**********			
		< SWITCH >			
S751	1-786-514-11	SWITCH, LEVER (SLIDE) (OPEN/CLOSE DETECT)			
**********					
	1-688-747-11	TRANS BOARD			
		**********			
*	1-533-213-31	HOLDER, FUSE			
		< CAPACITOR >			
C901	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C902	1-126-942-61	ELECT	1000uF	20%	25V
		< CONNECTOR >			
CN901	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P			
* CN902	1-764-334-11	PLUG, CONNECTOR 11P			
		< DIODE >			
D902	8-719-988-61	DIODE 1SS355TE-17			
D903	8-719-988-61	DIODE 1SS355TE-17			
D904	8-719-988-61	DIODE 1SS355TE-17			
D905	8-719-988-61	DIODE 1SS355TE-17			
D906	8-719-988-61	DIODE 1SS355TE-17			
		< RESISTOR >			
⚠R901	1-219-237-11	SOLID	3.3M	20%	1/2W F
		< RELAY >			
⚠RY902	1-755-276-11	RELAY, POWER			
		< TRANSFORMER >			
⚠T902	1-439-734-11	TRANSFORMER, POWER (GX45)			
⚠T902	1-439-735-11	TRANSFORMER, POWER (RG440:AEP,UK)			
⚠T902	1-439-736-11	TRANSFORMER, POWER (RG440:EXCEPT AEP,UK)			
**********					
		VIDEO OUT BOARD			
		**********			
		< CONNECTOR >			
* CN003	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
		< JACK >			
JK004	1-774-227-11	JACK, PIN 1P (VIDEO OUT)			
**********					

Ref. No.	Part No.	Description			Remark
	1-688-081-21	6 STREAM LED BOARD			
		**********			
		< JUMPER RESISTOR >			
JR002	1-216-864-11	METAL CHIP	0	5%	1/10W
		< DIODE >			
LED601	8-719-058-04	LED SEL5223S-TP15 (STREAM 1)			
LED602	8-719-058-04	LED SEL5223S-TP15 (STREAM 2)			
LED603	8-719-058-04	LED SEL5223S-TP15 (STREAM 3)			
LED604	8-719-058-04	LED SEL5223S-TP15 (STREAM 4)			
LED605	8-719-058-04	LED SEL5223S-TP15 (STREAM 5)			
LED606	8-719-058-04	LED SEL5223S-TP15 (STREAM 6)			
		< RESISTOR >			
R617	1-216-182-00	RES-CHIP	220	5%	1/8W
R618	1-216-182-00	RES-CHIP	220	5%	1/8W
R619	1-216-182-00	RES-CHIP	220	5%	1/8W
R620	1-216-182-00	RES-CHIP	220	5%	1/8W
R621	1-216-182-00	RES-CHIP	220	5%	1/8W
R622	1-216-182-00	RES-CHIP	220	5%	1/8W
R935	1-216-182-00	RES-CHIP	220	5%	1/8W
R936	1-216-182-00	RES-CHIP	220	5%	1/8W
**********					

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Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	
		**********	
6	1-769-939-11	WIRE (FLAT TYPE) (11 CORE) (GX45)	
6	1-773-003-11	WIRE (FLAT TYPE) (15 CORE) (RG440)	
52	1-796-485-51	DECK, MECHANICAL	
58	1-769-914-11	WIRE (FLAT TYPE) (9 CORE)	
59	1-773-322-11	WIRE (FLAT TYPE) (31 CORE)	
60	1-827-145-11	WIRE (FLAT TYPE) (13 CORE)	
⚠205	1-690-608-11	CORD, POWER (RG440:AUS)	
⚠205	1-777-071-83	CORD, POWER (RG440:AEP,UK)	
⚠205	1-783-532-11	CORD, POWER (GX45)	
252	1-776-182-11	WIRE (FLAT TYPE) (5 CORE)	
317	1-471-035-11	MAGNET ASSY	
323	1-827-146-11	WIRE (FLAT TYPE) (19 CORE)	
352	1-823-859-11	WIRE (FLAT TYPE) (16 CORE)	
⚠F902	1-533-451-12	FUSE, GLASS TUBE (DIA.5) (3.15A/125V) (GX45)	
⚠F902	1-533-470-11	FUSE, GLASS TUBE (DIA.5) (T3.15AL/250V)	(RG440)
⚠F903	1-533-452-12	FUSE, GLASS TUBE (DIA.5) (4A/125V) (GX45)	
⚠F903	1-533-472-11	FUSE, GLASS TUBE (DIA.5) (T5AL/250V) (RG440)	
⚠F904	1-533-452-12	FUSE, GLASS TUBE (DIA.5) (4A/125V) (GX45)	
⚠F904	1-533-472-11	FUSE, GLASS TUBE (DIA.5) (T5AL/250V) (RG440)	
⚠F905	1-576-537-11	FUSE, GLASS TUBE (DIA.5) (8A/125V) (GX45)	
⚠F905	1-576-655-11	FUSE, GLASS TUBE (DIA.5) (T8AL/250V) (RG440)	
⚠F906	1-576-537-11	FUSE, GLASS TUBE (DIA.5) (8A/125V) (GX45)	
⚠F906	1-576-655-11	FUSE, GLASS TUBE (DIA.5) (T8AL/250V) (RG440)	
M731	1-763-072-11	FAN, DC	
M741	A-4723-963-A	MOTOR ASSY, TABLE (TABLE)	
M751	A-4736-655-A	MOTOR ASSY, LOADING (LOADING)	
RE701	1-477-680-11	ENCODER, ROTARY	(DISC TRAY ADDRESS DETECT)
⚠T901	1-439-810-11	TRANSFORMER, POWER (GX45)	
⚠T901	1-439-811-11	TRANSFORMER, POWER (RG440:AEP,UK)	
⚠T901	1-443-025-11	TRANSFORMER, POWER (RG440:AUS)	
TU901	1-693-625-11	TUNER PACK (FM/AM) (ANTENNA) (GX45)	
TU901	1-693-626-11	TUNER PACK (FM/AM) (ANTENNA)	(RG440:AEP,UK)
TU901	1-693-628-11	TUNER PACK (FM/AM) (ANTENNA) (RG440:AUS)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

MEMO

REVISION HISTORY

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Also, clicking the version at the upper on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2003. 07	New
1.1	2004. 03	Part number correction of IC731. (SPM-04019)
1.2	2005. 04	Part number correction of Ref. No. 352. (SPM-05053)

SS-RG440

SERVICE MANUAL

Ver 1.2 2004. 09

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model

- SS-RG440 are speaker systems in MHC-GX25/GX45/RG220/ RG310/RG440S.

SPECIFICATIONS

Speaker system	3-way, 3-unit, bass-reflex type
Speaker units	
Woofer:	13 cm, cone type
Sub woofer:	13 cm, cone type
Tweeter:	5 cm, cone type
Nominal impedance	6 ohms
Dimensions (w/h/d)	Approx. 240 × 325 × 243 mm
Mass	Approx. 4.3 kg net per speaker

Design and specifications are subject to change without notice.

PARTS LIST

Part No.	Description	Remark
A-4738-565-A	FRONT SPEAKER ASSY (L) (MHC-RG220: AR,MX,E51)	
A-4738-566-A	FRONT SPEAKER ASSY (R) (MHC-RG220: AR,MX,E51)	
A-4741-784-A	SYSTEM (L) ASSY, SPEAKER	(EXCEPT MHC-RG220: AR,MX,E51)
A-4741-785-A	SYSTEM (R) ASSY, SPEAKER	(EXCEPT MHC-RG220: AR,MX,E51)

- Abbreviation
  AR : Argentine model
  E51 : 220 V AC area in E model
  MX : Mexican model

SPEAKER SYSTEM

9-877-126-03
2004I04-1
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Personal Audio Company
Published by Sony Engineering Corporation

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REVISION HISTORY

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Ver.	Date	Description of Revision
1.0	2003. 03	New
1.1	2003. 07	Addition of Destination (Canadian, AEP, UK, E, Australian model)
1.2	2004. 09	Part Number Correction of SYSTEM (L)/(R) ASSY, SPEAKER (SPM-04116)

SS-WG990

SERVICE MANUAL

Ver 1.0 2003. 07

US Model
Canadian Model
AEP Model
UK Model
Australian Model

- SS-WG990 are speaker systems in MHC-GX45/RG440S.

SPECIFICATIONS

Speaker system	Bass-reflex type
Speaker units	
Woofer:	20 cm, cone type
Nominal impedance	6 ohms
Dimensions (w/h/d)	Approx. 265 × 325 × 350 mm
Mass	Approx. 6.4 kg

Design and specifications are subject to change without notice.

PARTS LIST

Part No.	Description	Remark
A-4740-996-A	OVERALL ASSY (SS-WG990)	

SUB WOOFER SYSTEM

9-961-066-01
2003G04-1
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Ver.	Date	Description of Revision
1.0	2003. 07	New